

# fontscripts

Clea F. Rees\*

v0.1 (SVN Rev: 10412) 2024/09/27

## Abstract

`fontscripts` provides variant font encodings, support metrics and Lua script fragments to automate the creation of `TEX/LATEX 2ε` font files for 8-bit engines using `I3build`. A template-based system enables the automatic generation of font tables and `I3build` tests.

The script fragments<sup>1</sup> make it possible to automate the generation of `TEX` font metrics, virtual fonts, map files etc. and the conversion of fonts and encodings. For tools which do not otherwise support it, such as `fontinst`, the scripts enable the automatic addition of variable scaling in font definition files. A semi-automatic system tries to ensure font encoding names are unique.

The script fragments are primarily designed for `fontinst`, but can easily be modified to work with other tools. The default configuration is intended to be cross-platform and requires only tools included in `TEX Live`, but the documentation includes a simple adaption for integration with FontForge and GNU make.

## Contents

<b>1</b>	<b>Lua Script Fragments</b>	<b>2</b>
1.1	I3build Targets . . . . .	3
1.2	Lua Functions . . . . .	3
1.2.1	New Functions . . . . .	3
1.2.2	Redefined Functions . . . . .	4
1.3	Variables . . . . .	4
<b>2</b>	<b>Templates</b>	<b>7</b>
2.1	Font Tables . . . . .	7
2.2	Font Tests . . . . .	7
<b>3</b>	<b>Customisation</b>	<b>7</b>
3.1	Examples . . . . .	9

---

\*Bug tracker: [codeberg.org/cfr/nfssext/issues](https://codeberg.org/cfr/nfssext/issues) | Code: [codeberg.org/cfr/nfssext](https://codeberg.org/cfr/nfssext) | Mirror: [github.com/cfr42/nfssext](https://github.com/cfr42/nfssext)

<sup>1</sup>The main script fragments are written in *extremely elementary* Lua. This is the first thing I've ever attempted in Lua and I am not a programmer.

<b>4 Implementation</b>	<b>9</b>
4.1 Script Fragments . . . . .	10
4.1.1 fontinst.lua . . . . .	10
4.1.2 fnt-ctan.lua . . . . .	26
4.1.3 tag.lua . . . . .	28
4.2 Metrics . . . . .	28
4.2.1 dotsccbld.mtx . . . . .	28
4.2.2 newlatin-dotscc.mtx . . . . .	32
4.2.3 dotscmisc.mtx . . . . .	33
4.3 Encodings . . . . .	35
4.3.1 dotoldstyle.etx . . . . .	36
4.3.2 dotscc2.etx . . . . .	36
4.3.3 dottaboldstyle.etx . . . . .	36
4.3.4 lining.etx . . . . .	36
4.3.5 oldstyle.etx . . . . .	37
4.3.6 t1-cfr.etx . . . . .	37
4.3.7 t1-dotalt-f_ f.etx . . . . .	61
4.3.8 t1-dotinf.etx . . . . .	85
4.3.9 t1-dotinferior.etx . . . . .	108
4.3.10 t1-dotsup.etx . . . . .	132
4.3.11 t1-dotsuperior.etx . . . . .	156
4.3.12 t1-f_ f.etx . . . . .	180
4.3.13 tlj-f_ f.etx . . . . .	204
4.3.14 ts1-dotinf.etx . . . . .	204
4.3.15 ts1-dotsup.etx . . . . .	217
4.3.16 ts1-euro.etx . . . . .	230
4.3.17 ucdotalt.etx . . . . .	243
<b>Change History</b>	<b>244</b>
<b>Index</b>	<b>244</b>

## 1 Lua Script Fragments

`fontinst.lua` provides two custom `l3build` targets and five new Lua functions. In addition,

it redefines three `l3build` functions (two of which do nothing by default). As well as those provided by `l3build`, a number of additional variables are used by these functions to determine what, where and how they should operate.

## 1.1 `l3build` Targets

`fnttarg` (*targ*) Runs `fontinst()`.

Builds traditional T<sub>E</sub>X font files for 8-bit engines. The building is done in `unpackdir`. The results are copied to `keepdir` and the intermediate results to `keeptempdir`. Files in the former are copied back into the `builddir` when building documentation, running tests etc.

`uniquifyencs` (*targ*) (*encoding tag*)

Tries to ensure that the names of encoding files and font encodings are unique by editing font definition files and map file fragments in `keepdir`. *(encoding tag)* is optional. If no argument is given and `encodingtag` is empty, a suitable tag will be determined automatically<sup>2</sup>.

## 1.2 Lua Functions

### 1.2.1 New Functions

`finst()` (*fn*) `finst(<patt>, <dir>, <mode>)`

Compile the second `fontinst` stage.

Called by `fontinst()`. There is usually no need to call this function directly.

`fontinst()` (*fn*) `fontinst(<dir>, <mode>)`

The main function called by `fnttarg`.

The function assumes `fontinst` is used but can be redefined to build files using alternative tools as appropriate.

The default definition calls `finst()`, `fntkeeper()` and `uniquify()` in addition to performing initial compilation. The process requires the usual `fontinst` setup i.e. a driver to generate the initial files and a second file to create map file fragments.

If a variable scaling factor is used, the font definition files will be edited to ensure this works, since `fontinst` apparently supports scaling only by a fixed factor. For a simple demonstration of how to set this up, see, for example, `baskervaldad`'s driver which includes

```
\declaresize{}{-> \string\ybvr@@scale}
```

Shape declarations should then be written without scaling,

```
\installfont{ybvr8t}{ybvr8r,ybvr8sr,newlatin}{t1-baskervald}{T1}{ybvr}{m}{n}{}
```

since scaling will be added after the font definition files are created,

---

<sup>2</sup>Hopefully.

```
\expandafter\ifx\csname ybv@scale\endcsname\relax
  \let\ybv@@scale\empty
\else
  \edef\ybv@@scale{s*[\csname ybv@scale\endcsname]}\%
\fi

\DeclareFontFamily{T1}{ybv}{}{}
```

\DeclareFontShape{T1}{ybv}{m}{n}{

 <-> \ybv@@scale ybvr8t
}{}{}

to enable a suitable option in the `sty` file.

**fnt\_test()** (*fn*) **fnt\_test**(*<fn*tpkgname*>*, *<fds>*, *<content>*, *<maps>*, *<fdsdir>*)

Auto-generates `lvt` files suitable for use with `l3build check` from a template.

**fntkeeper()** (*fn*) **fntkeeper()**

Copies generated files to `keepdir` and/or `keeptempdir` to prevent deletion by `l3build`.

This function is called by `fontinst()` and may be useful if that function is redefined.

**uniquify()** (*fn*) **uniquify**(*<tag>*)

Tries to ensure the names of font encodings and encoding files are unique by editing font definition files and map file fragments.

This function is used by `fontinst()` or may be called directly using the `uniquifyencs` target.

### 1.2.2 Redefined Functions

**checkinit\_hook()** (*fn*) **checkinit\_hook()**

This is a standard `l3build` function which does nothing by default. `fontinst.lua` redefines it to automatically generate test files suitable for use with `l3build check` if a test template is available.

**copyctan()** (*fn*) **copyctan()**

This is extended to copy files from `keepdir` and to impose a single-layer of sub-directories of the kind required by `CTAN` for font distributions.

**docinit\_hook()** (*fn*) **docinit\_hook()**

This is a standard `l3build` function which does nothing by default. `fontinst.lua` redefines it to automatically generate font tables suitable for use with `l3build doc` from a template.

### 1.3 Variables

Defaults assigned by `fontinst.lua` to both `l3build` and `fontscripts` variables are listed in table 1 and table 2 respectively. At least some of these variables would need adjustment in order to use `fontscripts` for a different project, let alone in a different environment.

**autotestfds** (*var*) **autotestfds** = {*<glob>*}

Table 1: fontinst defaults for l3build variables.

Variable	Value
bakext	= ".bkup"
checkdeps	= {maindir .. "/nfssext-cfr", maindir .. "/fnt-tests"}
checkengines	= {"pdftex"}
checkformat	= "latex"
cleanfiles	= {keeptempfiles}
ctanreadme	= "README.md"
demofiles	= {"*-example.tex"}
flatten	= true
flattentds	= false
installfiles	= {"*.afm", "*.cls", "*.enc", "*.fd", "*.map", "*.otf", "*.pfb", "*.sty", "*.tfm", "*.ttf", "*.vf"}
manifestfile	= "manifest.txt"
nifergwall	= 0
ntarg	= "fnttarg"
packtdszip	= true
sourcefiledir	= sourcefiledir or ".."
sourcefiles	= {"*.afm", "afm/*.afm", "*.pfb", "*.dtx", "*.ins", "opentype/*.otf", "*.otf", "tfm/*.tfm", "truetype/*.ttf", "*.ttf", "type1/*.pfb"}
tagfiles	= {"*.dtx", "*.ins", "manifest.txt", "MANIFEST.txt", "README", "README.md"}
tdslocations	= { "fonts/afm/" .. vendor .. "/" .. module .. "/" .. "*.afm", "fonts/enc/dvips/" .. module .. "/" .. "*.*.enc", "fonts/map/dvips/" .. module .. "/" .. "*.*.map", "fonts/opentype/" .. vendor .. "/" .. module .. "/" .. "*.*.otf", "fonts/tfm/" .. vendor .. "/" .. module .. "/" .. "*.*.tfm", "fonts/truetype/" .. vendor .. "/" .. module .. "/" .. "*.*.ttf", "fonts/type1/" .. vendor .. "/" .. module .. "/" .. "*.*.pfb", "fonts/type1/" .. vendor .. "/" .. module .. "/" .. "*.*.pfm", "fonts/vf/" .. vendor .. "/" .. module .. "/" .. "*.*.vf", "source/fonts/" .. module .. "/" .. "*.*.etx", "source/fonts/" .. module .. "/" .. "*.*.mtx", "source/fonts/" .. module .. "/" .. "*-*drv.tex", "source/fonts/" .. module .. "/" .. "*-*map.tex", "tex/latex/" .. module .. "/" .. "*.*.fd", "tex/latex/" .. module .. "/" .. "*.*.sty" }
typesetdeps	= {maindir .. "/nfssext-cfr"}
typesetexe	= "TEXMFDIR=.:./local: pdflatex"
typesetfiles	= typesetfiles or {"*.dtx", "-tables.tex", "-example.tex"}
typesetsourcefiles	= {keepdir .. "/*", "nfssext-cfr*.sty"}
unpackexe	= "pdflatex"
unpackfiles	= {"*.ins"} / 267 —
utarg	= "uniquifyencs"

Table 2: fontinst defaults for fontscript variables.

Variable	Value
autotestfds	= autotestfds or {}
binaryfiles	= {"*.pdf", "*.zip", "*.vf", "*.tfm", "*.pfb", "*.ttf", "*.otf", "*.tar.gz"}
binmakers	= {"*-pltotf.sh"}
familymakers	= {"*-drv.tex"}
fnttestfds	= fnttestfds or {}
keepdir	= keepdir or sourcefiledir .. "/keep"
keepfiles	= keepfiles or {"*.enc", ".*.fd", ".*.map", ".*.tfm", ".*.vf"}
keeptempdir	= keeptempdir or sourcefiledir .. "/keeptemp"
keeptempfiles	= keeptempfiles or {"*.mtx", ".*.pl", "*-pltotf.sh", "*-rec.tex", ".*.vpl", ".*.zz"}
mapmakers	= {"*-map.tex"}
vendor	= vendor or "public"

See also `testfds`.

`binmakers (var) binmakers = {<globs>}`

Scripts to run to convert human-readable TeX font metrics/virtual font metrics into binary TeX font metrics and virtual fonts.

`familymakers (var) familymakers = {<globs>}`

Source files `fontinst()` should compile to generate TeX support files.

For the default definition of `fontinst()` this variable should specify the driver or drivers to be compiled.

`fnttestfds (var) fnttestfds = {<globs>}`

Files to use when generating test files for 13build.

`keepdir (var) keepdir = "<dir>"`

Directory to store final products of font creation e.g. font definitions, map file fragments, TeX font metrics, virtual fonts etc.

`keeptempdir (var) keeptempdir = "<dir>"`

Directory to store intermediate products of font creation e.g. human-readable TeX font metrics, virtual font metrics etc.

`keepfiles (var) keepfiles = {<globs>}`

Files to copy to `keepdir`.

`keeptempfiles (var) keeptempfiles = {<globs>}`

Files to copy to `keeptempdir`.

`mapmakers (var) mapmakers = {<globs>}`

Source files `finst()` should compile to generate map file fragments etc.

`vendor (var) mapmakers = "<vendor>"`

Vendor directory for font installation such as `public` or `arkandis`.

## 2 Templates

By default, `fontinst.lua` is able to utilise two kinds of `tex` template. By default, it is assumed these templates are located in `maindir..''fnt-tests''`. In order for this to work, this directory must include a `build.lua` even though there is nothing to build. Otherwise, `l3build` cannot recognise the directory's contents as legitimate and fails to copy them correctly into the `build` directory.

```
module = "fnt-tests"
maindir = ".."
sourcefiles = {"*.tex"}
installfiles = {"*.tex"}
```

Font packages should then be located in subdirectories or sub-subdirectories of `maindir` with `build.lua` scripts configured appropriately.

### 2.1 Font Tables

A template for producing font tables as part of package documentation is provided. The template is used in `fontinst.lua`'s `doc_init()` hook to generate `tex` files populated with font information from font definition files. This is then compiled by `l3build doc` to produce font tables.

### 2.2 Font Tests

If a template is found in the font test directory, it will be used in `fontinst.lua`'s `check_init()` hook to generate `lvt` files populated with font information from font definition files. These tests are then compiled by `l3build check` as part of the test suite. Certain file patterns are excluded from testing. In particular, separate tests are not generated for `ts1 fd` files because these families are typically better tested along with their `t1` counterparts.

## 3 Customisation

As in the case of `l3build`, you can replace functions and targets at will, albeit on a much more limited scale. Although it would be better to just not use `fontinst.lua` at all if you want to redefine everything, it can make sense to redefine `fontinst()` if, say, you want to use different font creation tools but make use of the functions for stashing generated files, generating font tables, testing etc.

For example, `berenisadf` was built using a `build.lua` containing

```
autotcfds ={ "ts1ybd2j.fd", "ts1ybd2.fd", "ts1ybdj.fd", "ts1ybd.fd" }
dofile(maindir .. "/fontinst.lua")
```

```

function fntmake (dir,mode)
    dir = dir or unpackdir
    mode = mode or "errorstopmode --halt-on-error"
    print("Unpacking ...\\n")
    local errorlevel = unpack()
    print("Running make. Please be patient ...\\n")
    errorlevel = run(dir, "chmod +x ff-ybd.pe")
    if errorlevel ~=0 then
        gwall("Attempt to make fontforge script executable ", unpackdir, errorlevel)
    else
        errorlevel = run(dir, "make -f Makefile.make all")
        if errorlevel ~= 0 then
            gwall("make ", unpackdir, errorlevel)
        end
        -- make ts1 swash families so tc commands pick up the characters in ly1
        for i, j in ipairs(autotcfds) do
            local jfam = string.gsub(j, "^ts1(.*)%.fd$", "%1")
            local jnewfam = jfam .. "w"
            local jnew = string.gsub(j, "(%.fd)$", "w%1")
            local f = assert(io.open(unpackdir .. "/" .. j, "rb"))
            local content = f:read("*all")
            f:close()
            -- copied from l3build
            -- but I don't understand why the first subs is needed
            -- is it a problem if the file doesn't end with a newline?
            content = string.gsub(content .. (string.match(content, "\n$") and "" or "\n"), "")
            local new_content = string.gsub(content, "{$ .. jfam .. "}", "{$ .. jnewfam .. ")
            new_content = string.gsub(new_content, "(ts1[^%.]*)(%.fd)", "%1w%2")
            new_content = string.gsub(new_content, "(TS1/ybd[a-z0-9]*)", "%1w")
            f = assert(io.open(unpackdir .. "/" .. jnew, "w"))
            -- this somehow removes the second value returned by string.gsub??
            f:write((string.gsub(new_content, "\n", os_newline_cp)))
            f:close()
        end
        errorlevel = fntkeeper()
        if errorlevel ~= 0 then
            gwall("FONT KEEPER FAILED! DO NOT MAKE STANDARD TARGETS WITHOUT RESOLVING!! ", un
        end
    end
    return nifergwall
end
target_list[ntarg] = {
    func = fntmake,
    desc = "Creates TeX font files",
    pre = function(names)
        if names then
            print("fntmake does not need names\\n")
            help()
            exit(1)
        end
    end
}

```

```

    return 0
end
}

```

That is, `berenisadf` doesn't use `fontinst()` at all, but `fntmake()`, which simply invokes `gnu make` and calls `fntkeeper()`<sup>3</sup>.

### 3.1 Examples

The latest versions of the following packages were developed using `fontscripts` and build using `l3build`<sup>4</sup>. Full details, including the use of templates and scaling are available on [CODEBERG](#) or [GITHUB](#).

- GUST:
  - `cfr-lm`
- ARKANDIS:
  - `baskervaldadf`
  - `berenisadf`
  - `electrumadf`
  - `librisadf`
  - `romandeadf`
  - `venturisadf.`

## 4 Implementation

`fnt-tables.tex` (*tpt*)

```

1 \pdftracingfonts=1
2 \RequirePackage{svn-prov}
3 \ProvidesFile{SVN{$Id: fontscripts.dtx 10412 2024-09-27 15:10:34Z cfrees $}[v0.1
4 \revinfo][\outFileName]
5 \DefineFileInfoSVN
6
7 \documentclass[10pt,a4paper]{article}
8 \usepackage{geometry}
9 \usepackage{fonttable}
10 \newcommand\sampletable[4]{%
11   #1/#2/#3/#4:\par\noindent
12   \xfonttable{#1}{#2}{#3}{#4}%
13   \clearpage
14 }
15 % vim: ts=2:sw=2:tw=80:nospell

```

<sup>3</sup>It does not ensure encoding names are unique, but it should.

<sup>4</sup>Note that it is in no sense a dependency; it contains nothing ever required in typesetting.

## 4.1 Script Fragments

These are not standalone scripts, but files to be read by l3build to provide additional and/or divergent functions. Note that several are based on LPPL files not on CTAN, as the LATEX Project does not package their build scripts.

**These script fragments were not written for general use and will CERTAINLY FAIL if not adapted to your build environment.**

### 4.1.1 fontinst.lua

**fontinst.lua** (*lua*) Use `dofile()` in `build.lua` to add to l3build.

```

12 os.setenv ("PATH", "/usr/local/texlive/bin:/usr/bin:")
13 os.setenv ("TEXMFHOME", ".")
14 os.setenv ("TEXMFLOCAL", ".")
15 os.setenv ("TEXMFARCH", ".")
16 -----
17 -- copy non-public things from l3build
18 local os_newline_cp = "\n"
19 if os.type == "windows" then
20     if tonumber(status.luatex_version) < 100 or
21         (tonumber(status.luatex_version) == 100
22          and tonumber(status.luatex_revision) < 4) then
23         os_newline_cp = "\r\n"
24     end
25 end
26 -----
27 nifergwall = 0

```

**fnttarg** (*targ*) Create fonts. Default assumes `fontinst`. Redefine element in target list for alternative tools.  
For example, berenisadf's `build.lua` redefines it to use GNU `make`, FONTFORGE etc.

```
28 ntarg = "fnttarg"
```

**uniquifyencs** (*targ*) To ensure unique encodings without rebuilding fonts.

```

29 utarg = "uniquifyencs"

30 function gwall (msg,file,rtn)
31     file = file or "current file"
32     msg = msg or "Error: "
33     rtn = rtn or 0
34     if rtn ~= 0 then
35         nifergwall = nifergwall + rtn
36         print (msg .. file .. " failed (" .. rtn .. ")\n")
37     end
38 end

```

**finst()** (*fn*) Is to `finst` what `fontinst` is to `fontinst`.

```
39 end
40 function finst (patt,dir,mode)
41   dir = dir or "."
42   mode = mode or "nonstopmode"
43   local cmd = "pdftex --interaction=" .. mode
44   local targs = {}
45   -- https://lunarmodules.github.io/luafilesystem/examples.html (expl)
46   -- l3build-file-functions.lua (filelist fn)
47   targs = filelist(dir,patt)
48   for i,j in ipairs(targs) do
49     local errorlevel = tex(j,dir,cmd)
50     gwall("Compilation of ", j, errorlevel)
51   end
52 end
```

fntkeeper() (*fn*) Keep fonts between l3build runs unless fnttarg explicitly called.

```
53 function fntkeeper ()
54   local dir = dir or unpackdir
55   local rtn = direxists(keepdir)
56   if not rtn then
57     local errorlevel = mkdir(keepdir)
58     if errorlevel ~= 0 then
59       print("DO NOT BUILD STANDARD TARGETS WITHOUT RESOLVING!!\n")
60       gwall("Attempt to create directory ", keepdir, errorlevel)
61     end
62   else
63     local errorlevel = cleandir(keepdir)
64     if errorlevel ~= 0 then
65       print("KEEP CONTAMINATED!\n")
66       gwall("Attempt to clean directory ", keepdir,errorlevel)
67     end
68   end
69   local keepdir = abspath(keepdir) -- abspath requires existence
70   if keepfiles ~= {} then
71     for i,j in ipairs(keepfiles) do
72       local rtn = cp(j, unpackdir, keepdir)
73       if rtn ~= 0 then
74         gwall("Copy ", j, errorlevel)
75         print("DO NOT BUILD STANDARD TARGETS WITHOUT RESOLVING!\\n")
76       end
77     end
78   else
79     print("ARE YOU SURE YOU DON'T WANT TO KEEP THE FONTS??!!\\n")
80   end
81   if keeptempfiles ~= {} then
82     rtn = direxists(keeptempdir)
83     if not rtn then
84       local errorlevel = mkdir(keeptempdir)
85       if errorlevel ~= 0 then
```

```

86         gwall("Attempt to create directory ", keeptempdir, errorlevel)
87     end
88 else
89     local errorlevel = cleandir(keeptempdir)
90     if errorlevel ~= 0 then
91         print("keeptemp contaminated!\n")
92         gwall("Attempt to clean directory ", keeptempdir, errorlevel)
93     end
94 end
95 for i,j in ipairs(keeptempfiles) do
96     local errorlevel = cp(j,unpackkdir,keeptempdir)
97     if errorlevel ~= 0 then
98         gwall("Copy ", j, errorlevel)
99     end
100    end
101 end
102 return nifergwall
103 end

```

`uniquify()` (*fn*) Ensure encoding names are unique.

```

104 function uniquify (tag)
105     local dir = ""
106     tag = tag or encodingtag or ""
107     local pkgbase = pkgbase or ""
108     if standalone then
109         dir = keepdir
110         if pkgbase == "" then
111             print("pkgbase unspecified. Trying to guess ... ")
112             if ctanpkg ~= module and module ~= "" and module ~= nil then
113                 print("Guessing " .. module)
114                 pkgbase = module
115             else
116                 pkgbase = string.gsub(ctanpkg, "adf$", "")
117                 if pkgbase ~= "" then
118                     print("Guessing " .. pkgbase)
119                 end
120             end
121         end
122     else
123         dir = unpackkdir
124         if pkgbase == "" then
125             local pkglist = filelist(dir,"*.sty")
126             if #pkglist ~= 0 then
127                 pkgbase = pkglist[1]
128             end
129         end
130     end
131     local encs = encs or filelist(dir,"*.enc")
132     local maps = maps or filelist(dir,"*.map")

```

```

133     if #encs == 0 then
134         return 0
135     else
136         if tag == "" then
137             if #maps ~= 0 then
138                 if #maps == 1 then
139                     tag = string.gsub(maps[1],"%.map$","",)
140                 else
141                     local t = ""
142                     local tt = ""
143                     for i,j in ipairs(maps) do
144                         if tt == t then
145                             tt = string.gsub(j,"%w%.map$","",)
146                         else
147                             if t == "" then
148                                 t = string.gsub(j,"%w%.map$","",)
149                             end
150                         end
151                     end
152                     if t == tt then
153                         tag = tt
154                     else
155                         gwall("Attempt to find tag","",1)
156                     end
157                 end
158             end
159         end
160         if tag ~= "" then
161             for i, j in ipairs(encs) do
162                 if string.match(j,"- .. tag .. "%.enc$") or string.match(j, module) or string.
163                 print(j .. " .. OK\n")
164             else
165                 local targenc = (string.gsub(j,"%enc$","- .. tag .. ".enc"))
166                 print("Target encoding is " .. targenc .. "\n")
167                 if fileexists(dir .. "/" .. targenc) then
168                     gwall("Target encoding exists !! ", targenc, 1)
169                     return 1
170                 else
171                     local f = assert(io.open(dir .. "/" .. j,"rb"))
172                     local content = f:read("*all")
173                     f:close()
174                     local new_content = (string.gsub(content,"(\n%%%BeginResource: encoding f
175                     if new_content ~= content then
176                         print("Writing unique encoding to " .. targenc)
177                         f = assert(io.open(dir .. "/" .. targenc,"w"))
178                         -- this somehow removes the second value returned by string.gsub??
179                         f:write((string.gsub(new_content,"\n",os_newline_cp)))
180                         f:close()
181                         if fileexists(dir .. "/" .. targenc) then
182                             local errorlevel = rm(dir,j)

```

```

183     if errorlevel ~= 0 then
184         gwall("Attempt to rm old encoding ",j,errorlevel)
185     end
186     if #maps ~= 0 then
187         local jpatt = string.gsub(j,"%-","%-%")
188         jpatt = string.gsub(jpatt,"%.","%%.")
189         for k,m in ipairs(maps) do
190             f = assert(io.open(dir .. "/" .. m,"rb"))
191             local mcontent = f:read("*all")
192             f:close()
193             local new_mcontent = (string.gsub(mcontent,"(%<%[?])" .. jpatt .. "%"))
194             if new_mcontent ~= mcontent then
195                 print("Writing adjusted map lines to " .. m)
196                 f = assert(io.open(dir .. "/" .. m,"w"))
197                 -- this somehow removes the second value returned by string.gsub()
198                 f:write((string.gsub(new_mcontent,"\n",os_newline_cp)))
199                 f:close()
200             else
201                 gwall("Amending map ",m,1)
202             end
203         end
204     else
205         print("FOUND NO MAPS??\n")
206     end
207     else
208         gwall("Attempt to write ",targenc,1)
209     end
210     else
211         gwall("Attempt to uniquify " .. j .. " as ",targenc,1)
212     end
213     end
214     end
215     end
216     end
217     return nifergwall
218   end
219   print("Something weird happened.\n")
220   return 1
221 end

```

`fontinst()` (*fn*) Configured for `fontinst`.

```

222   function fontinst (dir,mode)
223     dir = dir or unpackdir
224     mode = mode or "errorstopmode --halt-on-error"
225     standalone = false
226     encodingtag = encodingtag or ""
227     -- if not direxists(dir) then
228     -- print("Missing directory. Unpacking first.\n")
229     print("Unpacking ... \n")

```

```

230     local errorlevel = unpack()
231     -- end
232     local tfmfiles = filelist(dir,"*.tfm")
233     for i,j in ipairs(tfmfiles) do
234         local plname = string.gsub(j, "%.tfm$", ".pl")
235         if fileexists(unpackdir .. "/" .. plname) then
236             print(plname .. " already exists!")
237             return 1
238         else
239             local cmd = "tftopl " .. j .. " " .. plname
240             local errorlevel = runcmd(cmd,dir)
241             gwall("Conversion to pl from tfm ",j,errorlevel)
242             -- remove tfm to reduce pollution of package later
243             rm(unpackdir,j)
244             gwall("Deletion of tfm ", j, errorlevel)
245         end
246     end
247     for i,j in ipairs(familymakers) do
248         local errorlevel = finst(j,dir,mode)
249         gwall("Compilation of driver ", j, errorlevel)
250     end
251     if nifergwall ~= 0 then return nifergwall end
252     for i,j in ipairs(mapmakers) do
253         local errorlevel = finst (j,dir,mode)
254         gwall("Compilation of map ", j, errorlevel)
255     end
256     if nifergwall ~= 0 then return nifergwall end
257     for i,j in ipairs(binmakers) do
258         local targs = filelist(dir,j)
259         -- https://www.lua.org/pil/21.1.html
260         for k,m in ipairs(targs) do
261             targ = dir .. "/" .. m
262             -- is this really the right way to do this?
263             -- surely it is not at all safe?
264             -- though presumably no worse than executing the script directly
265             for line in io.lines(targ) do
266                 if string.match(line,"^pltotf [a-zA-Z0-9%-]+%.pl [a-zA-Z0-9%-]+%.tfm$") then
267                     local errorlevel = runcmd(line,dir)
268                     gwall("Creation of TFM using " .. line .. " from ", j, errorlevel)
269                 else
270                     print("Ignoring unexpected line \" .. line .. "\" in " .. j .. ".\n")
271                     nifergwall = nifergwall + 1
272                 end
273             end
274         end
275     end
276     if nifergwall ~= 0 then return nifergwall end
277     local targs = filelist(dir,"*.vpl")
278     for i,j in ipairs(targs) do
279         local cmd = "vptovf " .. j

```

```

280     local errorlevel = runcmd(cmd,dir)
281     gwall("Creation of virtual font from ", j, errorlevel)
282 end
283 -- edit the .fd files if a scale factor is declared because fontinst
284 -- doesn't allow us to do this and the last message to the mailing list
285 -- is from 2022 with no response from the maintainer
286 local fdfiles = filelist(unpackdir, "*.fd")
287 for i,j in ipairs(fdfiles) do
288     local f = assert(io.open(unpackdir .. "/" .. j,"rb"))
289     local content = f:read("*all")
290     f:close()
291     local new_content = content
292     local csscaleaux = string.match(content, "%<%-%> *\\(([%a%d] [%a%d]*@@scale))")
293     if csscaleaux ~= nil then
294         local csscale = string.gsub(csscaleaux, "@(@)", "%1")
295         if csscale ~= nil then
296             new_content = string.gsub(content, "(\\DeclareFontFamily{})", "%%" addaswyd o t1)
297         end
298         csscaleaux = string.match(content, "\\DeclareFontFamily{[^}]*}{[^}]*}{[^}]*}\\hyphen")
299         if csscaleaux ~= nil then
300             content = new_content
301             new_content = string.gsub(content, "(\\DeclareFontFamily{[^}]*}{[^}]*}{\\hyphen")
302         end
303         if new_content == content then
304             local f = assert(io.open(unpackdir .. "/" .. j,"w"))
305             -- this somehow removes the second value returned by string.gsub??
306             f:write((string.gsub(new_content, "\n", os_newline_cp)))
307             f:close()
308         end
309     end
310 end
311 local errorlevel = uniquify(encodingtag)
312 if errorlevel ~= 0 then
313     gwall("Encodings not uniquified! Do not submit to CTAN! uniquify(" .. encodingtag
314 end
315 errorlevel = fntkeeper()
316 if errorlevel ~= 0 then
317     gwall("FONT KEEPER FAILED! DO NOT MAKE STANDARD TARGETS WITHOUT RESOLVING!! fntkee"
318 end
319 return nifergwall
320 end

321 dofile(maindir .. "/tag.lua")
322 -- fnt_test

```

`fnt_test()` (*fn*) Assumes a suitable template is available for testing.

```

323 function fnt_test (fntpkgname,fds,content,maps,fdsdir)
324     local coll = ""
325     -- suffix ly -> ly1 ; no suffix -> t1

```



```

376     end
377     coll = maps .. "\n\\usepackage[enc=t1]{\" .. fntpkgname .. "}\n\\begin{document}\n\
378     colly = maps .. "\n\\usepackage[enc=ly1]{\" .. fntpkgname .. "}\n\\begin{document}\n\
379 else
380     -- assume package doesn't have an encoding option and is t1/ts1 only
381     coll = maps .. "\n\\usepackage{\" .. fntpkgname .. "}\n\\begin{document}\n\\START\n\
382 end
383 -- coll = maps .. "\n\\begin{document}\n\\START\n" .. coll .. "\n\\END\n\\end{document}"
384 local new_content = "%% Do not edit this file. It is generated by l3build and changes will be lost"
385 local f = assert(io.open(targfile,"w"))
386 -- this somehow removes the second value returned by string.gsub??
387 f:write((string.gsub(new_content,"\n",os_newline_cp)))
388 f:close()
389 if yy == 1 then
390     new_content = "%% Do not edit this file. It is generated by l3build and changes will be lost"
391     local f = assert(io.open(targfilely,"w"))
392     -- this somehow removes the second value returned by string.gsub??
393     f:write((string.gsub(new_content,"\n",os_newline_cp)))
394     f:close()
395 end
396 -- PAID Â CHEISIO YR ISOD! !
397 -- cp(targname,unpackdir,testfiledir)
398 local errorlevel = cp(targname,unpackdir,testdir)
399 if errorlevel ~= 0 then
400     gwall("Attempt to copy ", targname, errorlevel)
401 end
402 errorlevel = cp(targnamely,unpackdir,testdir)
403 if errorlevel ~= 0 then
404     gwall("Attempt to copy ", targnamely, errorlevel)
405 end
406 return nifergwall
407 end

```

`checkinit_hook()` (*fn*) Redefinition of standard l3build function.

```

408 function checkinit_hook ()
409     local filename = "fnt-test.lvt"
410     local file = unpackdir .. "/" .. filename
411     local fnttestdir = maindir .. "/fnt-tests"
412     local maps = ""
413     local mapfiles=filelist(keepdir, "*.map")
414     local mapsdir = ""
415     local fdsdir = ""
416     if #mapfiles == 0 then
417         mapfiles=filelist(unpackdir, "*.map")
418         if #mapfiles == 0 then
419             gwall("Attempt to find map files ", ".map", 1)
420             return 1
421         else
422             print("Using maps from " .. unpackdir .. "\n")

```

```

423     mapsdir = unpackdir
424   end
425 else
426   mapsdir = keepdir
427   print("Using maps from " .. keepdir .. "\n")
428 end
429 local fntpkgnames = fntpkgnames or filelist(unpackdir,"*.sty")
430 for i, j in ipairs(fntpkgnames) do
431   fntpkgnames[i] = string.gsub(j,"%..sty","",)
432 end
433 -----
434 local autotestfdstmp = filelist(keepdir, "*.fd")
435 -- if they're not kept, they may be source (e.g. berenisadf)
436 if #autotestfdstmp == 0 then
437   autotestfdstmp = filelist(unpackdir, "*.fd")
438   if #autotestfdstmp == 0 then
439     gwall("Attempt to find fd files ", ".fd", 1)
440     return 1
441   else
442     fdsdir = unpackdir
443     print("Using fds from " .. unpackdir .. "\n")
444   end
445 else
446   fdsdir = keepdir
447   print("Using fds from " .. keepdir .. "\n")
448 end
449 if #autotestfdstmp == 0 then
450   print("Something is amiss - this code should never be executed!\n")
451   gwall("Attempt to locate fd files ", ".fd", 1)
452 else
453   if #autotestfds == 0 then
454     for i, j in ipairs(autotestfdstmp) do
455       if not string.match(j,"^ts1") then
456         table.insert (autotestfds, j)
457       end
458     end
459   end
460 end
461 -----
462 -- if fnttestfds.<package name> has been specified, use that (should be a table)
463 -- o/w assign the autotestfds table to fnttestfds.<package name>
464 -- but remember fnttestfds may be pairs and/or ipairs ...
465 -- there must be a better way to do this ...
466 if #fnttestfds == 0 then
467   for i,j in ipairs(fntpkgnames) do
468     if fnttestfds[j] == nil then
469       print("Auto-assigning autotestfds to fnttestfds[" .. j .. ".\n")
470       fnttestfds[j] = {}
471       for a,b in ipairs(autotestfds) do
472         table.insert(fnttestfds[j],b)

```

```

473         end
474     end
475   end
476 else
477   local testmes = {}
478   for i,j in ipairs(fnttestfds) do
479     table.insert(testmes,j)
480   end
481   for i, j in ipairs(fntpckgnames) do
482     -- I really don't understand tables (and I know this is very, very basic)
483     if fnttestfds[j] == nil then
484       fnttestfds[j] = {}
485       -- use only if fnttestfds isn't specified either as table of tables or table o
486       -- this doesn't seem very robust
487       for k, l in ipairs(testmes) do
488         table.insert (fnttestfds[j], l)
489       end
490     end
491   end
492 end
493 -----
494 for i, j in ipairs(mapfiles) do
495   maps = maps .. "\n\\pdfmapfile{-" .. j .. "}\n\\pdfmapfile{+" .. j .. "}"
496 end
497 -- maps = maps .. "\n\\pdfmapfile{+pdftex.map}"
498 if not fileexists(fnttestdir .. "/" .. filename) then
499   print("Skipping test creation.\n")
500 else
501   local errorlevel = cp(filename,fnttestdir,unpackdir)
502   -- local errorlevel = ren(unpackdir, filename, targname)
503   if errorlevel ~= 0 then
504     gwall("Copy ", filename, errorlevel)
505     return errorlevel
506   else
507     -- need to get content here
508     -- copy this from l3build-tagging.lua
509     local f = assert(io.open(file,"rb"))
510     local content = f:read("*all")
511     f:close()
512     -- ought to normalise line endings here
513     -- copied from l3build
514     -- but I don't understand why the first subs is needed
515     -- is it a problem if the file doesn't end with a newline?
516     content = string.gsub(content .. (string.match(content,"\n$") and "" or "\n"), "
517     content = string.gsub(content, "\\RequirePackage%{svn%-prov%}\\n\\ProvidesFileSVN
518 for i, j in ipairs(fntpckgnames) do
519   -- create the test file for each package
520   -- errorlevel = fnt_test(j,fnttestfds[j],content,maps)
521   -- dyw fnttestfds.j ddim yn gweithio yma!!
522   errorlevel = fnt_test(j,fnttestfds[j],content,maps,fdsdir)

```

```

523         if errorlevel ~= 0 then
524             gwall("Font test creation ", j, errorlevel)
525             return errorlevel
526         end
527     end
528     rm(unpackdir,filename)
529   end
530 end
531 return 0
532 end

```

`docinit_hook()` (*fn*) Redefinition of standard l3build function.

```

533 function docinit_hook ()
534 -- local fdfiles = filelist(keepdir, "*.fd")
535 local fdfiles = filelist(unpackdir, "*.fd")
536 local filename = "fnt-tables.tex"
537 local targname = ctnapkg .. "-tables.tex"
538 local file = unpackdir .. "/" .. filename
539 local targfile = unpackdir .. "/" .. targname
540 local coll = ""
541 local fnttestdir = maindir .. "/fnt-tests"
542 local maps = ""
543 local mapfiles=filelist(unpackdir, "*.map")
544 local yy = 0
545 for i, j in ipairs(mapfiles) do
546     maps = maps .. "\n\\pdfmapfile{-" .. j .. "}\n\\pdfmapfile{+" .. j .. "}"
547 end
548 if not fileexists(fnttestdir .. "/" .. filename) then
549     print("Skipping font tables.\n")
550 else
551     local errorlevel = cp(filename,fnttestdir,unpackdir)
552     -- local errorlevel = ren(unpackdir, filename, targname)
553     if errorlevel ~= 0 then
554         gwall("Copy ", filename, errorlevel)
555         return errorlevel
556     else
557         -- need to get content here
558         -- copy this from l3build-tagging.lua
559         local f = assert(io.open(file,"rb"))
560         local content = f:read("*all")
561         f:close()
562         -- ought to normalise line endings here
563         -- copied from l3build
564         -- but I don't understand why the first subs is needed
565         -- is it a problem if the file doesn't end with a newline?
566         content = string.gsub(content .. (string.match(content, "\n$") and "" or "\n"), "")
567         content = string.gsub(content, "\\\RequirePackage%{svn%-prov%}\n\\ProvidesFileSVN"
568         -- l3build-tagging.lua
569         for i, j in ipairs(fdfiles) do

```

```
570     if string.match(j,"^ly1") then
571         yy = 1
572     end
573     j = unpackdir .. "/" .. j
574     for line in io.lines(j) do
575         if string.match(line,"^\\\ DeclareFontShape%{[^%]}*%}%{[^%]}*%}%{[^%]}*%}%{[^%]}
576             coll = (coll .. string.gsub(string.gsub(line,"%{$","%%%"),"^\\\ DeclareFont
577             end
578         end
579     end
580     if yy == 1 then
581         maps = "\n\\input{ly1enc.def}\n" .. maps
582     end
583     coll = maps .. "\n\\begin{document}\n" .. coll .. "\n\\end{document}\n"
584     local new_content = "%% Do not edit this file. It is generated by l3build and c
585     local f = assert(io.open(targfile,"w"))
586     -- this somehow removes the second value returned by string.gsub??
587     f:write((string.gsub(new_content,"\n",os_newline_cp)))
588     f:close()
589     rm(unpackdir,filename)
590     cp(targname,unpackdir,sourcefiledir)
591     end
592   end
593   return 0
594 end
```

**fnttarg** (*targ*) Main target definition.

```
595 target_list[ntarg] = {
596     func = fontinst,
597     desc = "Creates TeX font file",
598     pre = function(names)
599         if names then
600             print("fontinst does not need names\n")
601             help()
602             exit(1)
603         end
604         return 0
605     end
606 }
```

**uniquifyencs** (*targ*) Secondary target. It is not normally necessary to invoke this target separately if using the default definition of **fnntarg**.

```
607 target_list[utarg] = {  
608     func = uniquify,  
609     desc = "Uniquifies encodings ONLY",  
610     pre = function(names)  
611         standalone = true  
612         if names and #names > 1 then
```

```
613     print("Too many encoding tags specified; no more than one allowed")
614     help()
615     exit(1)
616   else
617     names = names or encodingtag or ""
618   end
619   return 0
620 end
621 }
```

**autotestfds** (*var*) fd files to use when auto-generating build tests.

```
622 autotestfds = autotestfds or {}
623 bakext = ".bkup"
624 binaryfiles = {"*.pdf", "*.zip", "*vf", "*tfm", "*pfb", "*pfm", "*ttf", "*otf",
```

**binmakers** (*var*) Scripts to create binary tfm and/or vf from pl and/or vpl.

```
625 binmakers = {"*-pltotf.sh"}
626 checkdeps = {maindir .. "/nfssext-cfr", maindir .. "/fnt-tests"}
627 checkengines = {"pdftex"}
628 checkformat = "latex"
629 -- checksupfiles = {""}
630 cleanfiles = {keeptempfiles}
631 ctanreadme = "README.md"
632 demofiles = {"*-example.tex"}
```

**familymakers** (*var*) Files to compile to generate font definition files, human-readable metrics etc.

```
633 familymakers = {"*-drv.tex"}
634 flattentds = false
```

**fnttestfds** (*var*) Font definition files to use when auto-generating tests. May be either a table of globs or a table of tables of package names and lists of globs.

```
635 fnttestfds = fnttestfds or {}
636 installfiles = {"*.afm", "*.cls", "*.enc", "*.fd", "*.map", "*.otf", "*.pfb", "*.pfm",
637 -- match default as not yet existent
638 sourcefiledir = sourcefiledir or "."
```

**keepdir** (*var*) Directories to stash generated font files and intermediate build products. These should  
**keeptempdir** (*var*) **not** be subdirectories of builddir.

```
639 keepdir = keepdir or sourcefiledir .. "/keep"
640 keeptempdir = keeptempdir or sourcefiledir .. "/keeptemp"
```

**keepfiles** (*var*) Globs for generated font files and intermediate build products to stash in `keepdir` and **keeptempfiles** (*var*) `keeptempdir` respectively.

```
641  keepfiles = keepfiles or {"*.enc", ".*.fd", ".*.map", ".*.tfm", ".*.vf"}
642  keeptempfiles = keeptempfiles or {"*.mtx", ".*.pl", "*-pltotf.sh", "*-rec.tex", ".*.vpl"
643  manifestfile = "manifest.txt"
```

**mapmakers** (*var*) Files to compile to generate map file fragments.

```
644  mapmakers = {"*-map.tex"}
645  packtdszip = false
646  -- need module test or default?
647  sourcefiles = {"*.afm", "afm/*.afm", ".*.pfb", ".*.pfm", ".*.dtx", ".*.ins", "opentype/*.o
648  tagfiles = {"*.dtx", ".*.ins", "manifest.txt", "MANIFEST.txt", "README", "README.md"}
```

**vendor** (*var*) Vendor directory when installing.

```
649  -- vendor and module must be specified before tdslocations
650  vendor = vendor or "public"

651  tdslocations = {
652      "fonts/afm/" .. vendor .. "/" .. module .. "/" .. ".*.afm",
653      "fonts/enc/dvips/" .. module .. "/" .. ".*.enc",
654      "fonts/map/dvips/" .. module .. "/" .. ".*.map",
655      "fonts/opentype/" .. vendor .. "/" .. module .. "/" .. ".*.otf",
656      "fonts/tfm/" .. vendor .. "/" .. module .. "/" .. ".*.tfm",
657      "fonts/truetype/" .. vendor .. "/" .. module .. "/" .. ".*.ttf",
658      "fonts/type1/" .. vendor .. "/" .. module .. "/" .. ".*.pfb",
659      "fonts/type1/" .. vendor .. "/" .. module .. "/" .. ".*.pfm",
660      "fonts/vf/" .. vendor .. "/" .. module .. "/" .. ".*.vf",
661      "source/fonts/" .. module .. "/" .. ".*.etx",
662      "source/fonts/" .. module .. "/" .. ".*.mtx",
663      "source/fonts/" .. module .. "/" .. "*-drv.tex",
664      "source/fonts/" .. module .. "/" .. "*-map.tex",
665      "tex/latex/" .. module .. "/" .. ".*.fd",
666      "tex/latex/" .. module .. "/" .. ".*.sty"
667  }
668  -- after maindir
669  typesetdeps = {maindir .. "/nfssext-cfr"}
670  -- enable l3build doc/check to find font files
671  -- cannot concatenate variables here as they don't (yet?) exist
672  typesetexe = "TEXMFDOTDIR=.:./local: pdflatex"
673  typesetfiles = typesetfiles or {"*.dtx", "*-tables.tex", "*-example.tex"}
674  typesetsourcefiles = {keepdir .. "/*", "nfssext-cfr*.sty"}
675  unpackexe = "pdflatex"
676  unpackfiles = {"*.ins"}
677  -----
```

```
678 if fileexists(maindir .. "/fnt-ctan.lua") then
679   dofile(maindir .. "/fnt-ctan.lua")
680 end
681 -----
682 -- afmtotfm
683 -- only set this true for ultra simple symbol fonts!
684 afmtotfm = afmtotfm or false
685 -----
686 -- fnt_afmtotfm (dir,mode)
687 function fnt_afmtotfm (dir,mode)
688   dir = dir or unpackdir
689   mode = mode or "errorstopmode --halt-on-error"
690   local fntbasename = fntbasename or module
691   local map = mapfile or fntbasename .. ".map"
692   print("Unpacking ...\\n")
693   local errorlevel = unpack()
694   print("Running afm2tfm. Please be patient ...\\n")
695   local afms = filelist(unpackdir,"*.afm")
696   local content = ""
697   for i,j in ipairs(afms) do
698     local rtn = fileexists(unpackdir .. "/" .. string.gsub(j,"%afm",".enc"))
699     if not rtn then
700       errorlevel = run(dir, "afm2tfm " .. j .. " >> " .. dir .. "/" .. map .. ".tmp")
701     else
702       errorlevel = run(dir, "afm2tfm " .. j .. " -p " .. string.gsub(j,"%afm",".enc"))
703     end
704     if errorlevel ~= 0 then
705       gwall("afm2tfm (" .. j .. ") ",dir,errorlevel)
706     else
707       local g = assert(io.open(dir .. "/" .. map .. ".tmp","rb"))
708       local c = g:read("all")
709       g:close()
710       content = content .. string.gsub(c, "\n", " <" .. string.gsub(j,"%afm",".pfb"))
711       rm(dir, map .. ".tmp")
712     end
713   end
714   local f
715   f = assert(io.open(dir .. "/" .. map, "w"))
716   f:write((string.gsub(content,"\n",os_newline_cp)))
717   f:close()
718   errorlevel = fntkeeper()
719   if errorlevel ~= 0 then
720     gwall("FONT KEEPER FAILED! DO NOT MAKE STANDARD TARGETS WITHOUT RESOLVING!! ", unpackdir)
721   end
722   return nifergwall
723 end
724 -----
725 -- fnt_afmtotfm -> fnttarg
726 if afmtotfm then
727   target_list[ntarg] = {
```

```

728     func = fnt_afmtotfm,
729     desc = "Creates TeX font files",
730     pre = function(names)
731         if names then
732             print("fntmake does not need names\n")
733             help()
734             exit(1)
735         end
736         return 0
737     end
738 }
739 end
740 -----
741 -- vim: ts=2:sw=2:et:

```

#### 4.1.2 fnt-ctan.lua

**fnt-ctan.lua** (*lua*) Included by `fontinst.lua` if it exists in `maindir`. Changes the way the `ctan` target builds the archive to match [CTAN](#) requirements for font distributions.

```

742 -----
743 local exts = {}
744 -----
745 -----
746 -- origcopyctan()
747 -- copy David Carlisle
748 origcopyctan = copyctan

```

**extname()** (*fn*) Get extension from filename.

```

749 function extname(filename)
750     local b = basename(filename)
751     ext = string.gsub(b, "[^%.]*%.", "")
752     if ext == nil then
753         gwall("Failed to get extension ",ext,1)
754     end
755     return ext
756 end
757 -----

```

**copysubctan()** (*fn*) Sub-directories for [CTAN](#).

```

758 function copysubctan(files,srcdir,targdir)
759     local errorlevel
760     local extdir
761     if not direxists(targdir) then
762         errorlevel = mkdir(targdir)
763         if errorlevel ~= 0 then return errorlevel end
764     end

```

```

765     for i,j in ipairs(files) do
766         local ext = extname(j)
767         if exts[ext] == nil then
768             extdir = ext
769             exts[ext] = ext
770         else
771             extdir = exts[ext]
772         end
773         if not direxists(targdir .. "/" .. extdir) then
774             errorlevel = mkdir(targdir .. "/" .. extdir)
775             if errorlevel ~= 0 then return errorlevel end
776         end
777         errorlevel = cp(j,srcdir,targdir .. "/" .. extdir)
778         if errorlevel ~= 0 then return errorlevel end
779     end
780     return 0
781 end
782 -----

```

copyctan() (fn) Redefine function used by ctan.

```

783     function copyctan()
784         local keepdir = keepdir or sourcefiledir .. "/keep"
785         local errorlevel
786         local targdir = ctandir .. "/" .. ctanpkg
787         keptfiles = {}
788         if #exts == 0 then exts = {"afm","dtx","enc","fd","ins","map","md","otf","pdf","pfb"}
789         if not exts["pfb"] then exts["pfb"] = "type1" end
790         if not exts["pfm"] then exts["pfm"] = "type1" end
791         if not exts["ttf"] then exts["ttf"] = "truetype" end
792         if not exts["otf"] then exts["otf"] = "opentype" end
793         if not exts["fd"] then exts["fd"] = "latex" end
794         if not exts["dtx"] then exts["dtx"] = "source" end
795         if not exts["ins"] then exts["ins"] = "source" end
796         if not exts["md"] then exts["md"] = "doc" end
797         if not exts["txt"] then exts["txt"] = "doc" end
798         if not exts["tex"] then exts["tex"] = "doc" end
799         if not exts["pdf"] then exts["pdf"] = "doc" end
800         for i,j in ipairs(filelist(keepdir,"*.*")) do
801             if j ~= ".." and j ~= "." then
802                 table.insert(keptfiles,j)
803             end
804         end
805         copysubctan(keptfiles,keepdir,targdir)
806         origcopyctan()
807         local g = {}
808         for i,j in ipairs(exts) do
809             local f = filelist(targdir,"*." .. j)
810             if #f ~= 0 then
811                 for m,n in ipairs(f) do

```

```

812         if n ~= "README.md" and n ~= "README" then
813             table.insert(g,n)
814         end
815     end
816   end
817 end
818 if #g ~= 0 then
819   errorlevel = copysubctan(g,targdir,targdir)
820   if errorlevel ~= 0 then return errorlevel end
821 end
822 for i,j in ipairs(exts) do
823   errorlevel = rm(targdir, "*." .. j)
824   if errorlevel ~= 0 then return errorlevel end
825 end
826 if fileexists(targdir .. "/COPYING") then
827   if not direxists(targdir .. "/doc") then mkdir(targdir .. "/doc") end
828   errorlevel = cp("COPYING",targdir,targdir .. "/doc")
829   if errorlevel ~= 0 then return errorlevel end
830   errorlevel = rm(targdir, "COPYING")
831   if errorlevel ~= 0 then return errorlevel end
832 end
833 -- this is horrible: ctan() copies all the files, we deal with them, and then it cop
834 textfiles = {"README", "README.md"}
835 return 0
836 end

```

#### 4.1.3 tag.lua

This is just a copy of the function from `l3build-tagging.lua`. It is here because `fontinst.lua` calls a file containing a custom `tag.lua` file locally<sup>5</sup>. For an example of how to do this, see the `build-config.lua` file for  $\text{\LaTeX} 2\epsilon$ .

`tag.lua` (*lua*)

```

14 function update_tag(filename,content,tagname,tagdate)
15   return content
16 end

```

## 4.2 Metrics

These files influence the characters which end up in the  $\text{\TeX}$  fonts. For example, they may construct otherwise missing glyphs or adjust kerning pairs.

#### 4.2.1 dotsccbld.mtx

`dotsccbld.mtx` (*mtx*)

---

<sup>5</sup>This file is on [GITHUB](#) for the morbidly curious, along with at least three attempts to create a `manifest.txt`.

```

17 \relax
18
19 \metrics
20
21 \needsfontinstversion{1.917}
22
23 \usemtpackage{ltcmds}
24 \ProvidesMtxPackage{dotscbuild}
25
26 \begincomment
27 \section{Proper latin small capitals}
28
29 \subsection{Some utility commands}
30 \endcomment
31
32 \setcommand\setcsctopglyph#1#2#3#4{
33   \ifareglyphs{#2.sc,#3}\then
34     \setglyph{#1}
35     \topaccent{#2.sc}{#3}{#4}
36     \endsetglyph
37     \setleftrightkerning{#1}{#2.sc}{1000}
38   \Fi
39 }
40 \setcommand\setcscbotglyph#1#2#3#4{
41   \ifareglyphs{#2.sc,#3}\then
42     \setglyph{#1}
43     \botaccent{#2.sc}{#3}{#4}
44     \endsetglyph
45     \setleftrightkerning{#1}{#2.sc}{1000}
46   \Fi
47 }
48 \begincomment\medskip
49 A \textbf{Try: Set glyph} is an ordinary \textbf{Set glyph} which is
50 conditional on that a set of glyphs (those used to construct the
51 composite glyph) are available. It is technically e.g.
52 \begin{quotation}
53   \setcsctopglyph{\macroparameter{1}}{\macroparameter{2}}%
54   {\macroparameter{3}}{\macroparameter{4}}
55   \setcscbotglyph{\macroparameter{1}}{\macroparameter{2}}%
56   {\macroparameter{3}}{\macroparameter{4}}\par
57 \end{quotation}
58 (both of which are implemented in the code as simple four argument
59 commands), but in the list of commands below those two commands will
60 be typeset as
61 \resetcommand\setcsctopglyph#1#2#3#4{%
62   \Aheading{Try: Set glyph '\TypesetStringExpression{#1}'}
63   \topaccent{#2.sc}{#3}{#4}
64   \setleftrightkerning{#1}{#2.sc}{1000}
65 }
66 \resetcommand\setcscbotglyph#1#2#3#4{%
67   \Aheading{Try: Set glyph '\TypesetStringExpression{#1}'}
68   \botaccent{#2.sc}{#3}{#4}
69   \setleftrightkerning{#1}{#2.sc}{1000}
70 }

```

```

71 \begin{quotation}
72   \setcsctopglyph{\macroparameter{1}}{\macroparameter{2}}%
73   {\macroparameter{3}}{\macroparameter{4}}
74   \setcscbotglyph{\macroparameter{1}}{\macroparameter{2}}%
75   {\macroparameter{3}}{\macroparameter{4}}
76 \end{quotation}
77 \endcomment
78
79 \ifareglyphs{L,l.sc}\then
80   \setint{smallcapsscale}{%
81     \div{\mul{1000}{\height{l.sc}}}{\height{L}}}
82 }
83 \Else
84   \setint{smallcapsscale}{800}
85 \Fi
86
87
88 \setcsctopglyph{aacute.sc}{a}{acute}{500}
89 \setcsctopglyph{abreve.sc}{a}{breve}{500}
90 \setcsctopglyph{acircumflex.sc}{a}{circumflex}{500}
91 \setcsctopglyph{adieresis.sc}{a}{dieresis}{500}
92 \setcsctopglyph{agrave.sc}{a}{grave}{500}
93 \setcscbotglyph{ogonek.sc}{a}{ogonek}{900}
94 \setcsctopglyph{aring.sc}{a}{ring}{500}
95 \setcsctopglyph{atilde.sc}{a}{tilde}{500}
96
97 \setcsctopglyph{acute.sc}{c}{acute}{500}
98 \setcsctopglyph{ccaron.sc}{c}{caron}{500}
99 \setcsctopglyph{cedilla.sc}{c}{cedilla}{500}
100
101 \setcsctopglyph{dcaron.sc}{d}{caron}{500}
102
103 \setcsctopglyph{eacute.sc}{e}{acute}{500}
104 \setcsctopglyph{ecaron.sc}{e}{caron}{500}
105 \setcsctopglyph{ecircumflex.sc}{e}{circumflex}{500}
106 \setcsctopglyph{edieresis.sc}{e}{dieresis}{500}
107 \setcsctopglyph{egrave.sc}{e}{grave}{500}
108 \setcscbotglyph{ogonek.sc}{e}{ogonek}{850}
109
110 \setcsctopglyph{gbreve.sc}{g}{breve}{500}
111
112 \setcsctopglyph{iacute.sc}{i}{acute}{500}
113 \setcsctopglyph{icircumflex.sc}{i}{circumflex}{500}
114 \setcsctopglyph{idieresis.sc}{i}{dieresis}{500}
115 \setcsctopglyph{idotaccent.sc}{i}{dotaccent}{500}
116 \setcsctopglyph{igrave.sc}{i}{grave}{500}
117
118 \setcsctopglyph{acute.sc}{l}{acute}{250}
119
120 \ifareglyphs{l.sc,quoteright}\then
121   \setglyph{lcaron.sc}{%
122     \glyph{l.sc}{1000}}
123   \ifisint{monowidth}\then\Else \movert{-100} \Fi
124   \glyph{quoteright}{\int{smallcapsscale}}

```

```

125     \endsetglyph
126     \setleftkerning{lcaron.sc}{l.sc}{1000}
127 \Fi
128
129 \setcsctopglyph{nacute.sc}{n}{acute}{500}
130 \setcsctopglyph{ncaron.sc}{n}{caron}{500}
131 \setcsctopglyph{ntilde.sc}{n}{tilde}{500}
132
133 \setcsctopglyph{oacute.sc}{o}{acute}{500}
134 \setcsctopglyph{ocircumflex.sc}{o}{circumflex}{500}
135 \setcsctopglyph{odieresis.sc}{o}{dieresis}{500}
136 \setcsctopglyph{ograve.sc}{o}{grave}{500}
137 \setcsctopglyph{ohungarumlaut.sc}{o}{hungarumlaut}{500}
138 \setcsctopglyph{otilde.sc}{o}{tilde}{500}
139
140 \setcsctopglyph{racute.sc}{r}{acute}{500}
141 \setcsctopglyph{rcaron.sc}{r}{caron}{500}
142
143 \setcsctopglyph{sacute.sc}{s}{acute}{500}
144 \setcsctopglyph{scaron.sc}{s}{caron}{500}
145 \setcscbotglyph{scedilla.sc}{s}{cedilla}{500}
146
147 \setcsctopglyph{tcaron.sc}{t}{caron}{500}
148 \setcscbotglyph{tcedilla.sc}{t}{cedilla}{500}
149
150 \setcsctopglyph{uacute.sc}{u}{acute}{500}
151 \setcsctopglyph{ucircumflex.sc}{u}{circumflex}{500}
152 \setcsctopglyph{udieresis.sc}{u}{dieresis}{500}
153 \setcsctopglyph{ugrave.sc}{u}{grave}{500}
154 \setcsctopglyph{uhungarumlaut.sc}{u}{hungarumlaut}{500}
155 \setcsctopglyph{uring.sc}{u}{ring}{500}
156
157 \setcsctopglyph{yacute.sc}{y}{acute}{500}
158 \setcsctopglyph{ydieresis.sc}{y}{dieresis}{500}
159
160 \setcsctopglyph{zacute.sc}{z}{acute}{500}
161 \setcsctopglyph{zcaron.sc}{z}{caron}{500}
162 \setcsctopglyph{zdotaccent.sc}{z}{dotaccent}{500}
163
164 \begincomment
165 \subsection{Other glyphs that can be built}
166 \endcomment
167
168
169 \ifisglyph{dcroat.sc}\then
170   \setglyph{dbar.sc}
171   \glyph{dcroat.sc}{1000}
172 \endsetglyph
173 \setleftrightkerning{dbar.sc}{dcroat.sc}{1000}
174 \Else\ifisglyph{eth.sc}\then
175   \setglyph{dbar.sc}
176   \glyph{eth.sc}{1000}
177 \endsetglyph
178 \setleftrightkerning{dbar.sc}{eth.sc}{1000}

```

```

179 \Fi\Fi
180
181
182 \endmetrics

```

#### 4.2.2 newlatin-dotsc mtx

`newlatin-dotsc.mtx` (*mtx*) based on `newlatin.mtx` - because I couldn't figure out how to pass options...

```

183 \relax
184
185 \documentclass[twocolumn]{article}
186
187 \metrics
188
189 \needsfontinstversion{1.924}
190
191 \usemtxpackage{llbuild}
192
193 \usemtxpackage{lubuild}
194
195 \ifoption{nosc}\then \Else
196
197 \usemtxpackage{dotscbuild}
198 % \usemtxpackage{lsfake}
199 \usemtxpackage{dotscmisc}
200
201 \Fi
202
203 \usemtxpackage{ltpunct}
204
205
206 \usemtxpackage{ltcmds}
207
208 \unfakable{Gamma}
209 \unfakable{Delta}
210 \unfakable{Theta}
211 \unfakable{Lambda}
212 \unfakable{Xi}
213 \unfakable{Pi}
214 \unfakable{Sigma}
215 \unfakable{Upsilon}
216 \unfakable{Upsilon1}
217 \unfakable{Phi}
218 \unfakable{Psi}
219 \unfakable{Omega}
220
221 \foreach{accent}{grave,acute,circumflex,tilde,dieresis,hungarumlaut,%
222   ring,caron,breve,macron,dotaccent}
223   \ifisglyph{\str{accent}}\then
224     \resetglyph{\str{accent}}
225     \glyph{\str{accent}}{1000}
226     \resetdepth{0}

```

```

227     \endresetglyph
228     \Fi
229 \endfor(accent)
230
231
232 \setglyph{ringfitted}
233   \movert{\half{\sub{\width{A}}{\width{ring}}}}
234   \glyph{ring}{1000}
235   \movert{\otherhalf{\sub{\width{A}}{\width{ring}}}}
236 \endsetglyph
237
238
239 \setleftkerning{less}{guillemotleft}{1000}
240 \setleftkerning{greater}{guillemotright}{1000}
241
242
243 \endmetrics
244
245

```

#### 4.2.3 dotscmisc mtx

**dotscmisc.mtx** (*mtx*)

```

246 \relax
247
248 \metrics
249
250 \needsfontinstversion{1.917}
251
252 \ProvidesMtxPackage{dotscmisc}
253
254 \ifisglyph{i.sc}\then
255   \setglyph{dotlessi.sc}
256   \glyph{i.sc}{1000}
257   \setleftrightkerning{dotlessi.sc}{i.sc}{1000}
258 \endsetglyph
259 \Fi
260
261 \ifisglyph{j.sc}\then
262   \setglyph{dotlessj.sc}
263   \glyph{j.sc}{1000}
264   \setleftrightkerning{dotlessj.sc}{j.sc}{1000}
265 \endsetglyph
266 \Fi
267
268 \setint{smallcapsspacing}{0}
269
270 \ifisglyph{f.sc}\then
271
272 \setglyph{ff.sc}
273   \glyph{f.sc}{1000}
274

```

```
275   \movert{\add{\kerning{f.sc}{f.sc}}{\int{smallcapspacing}}}
276   \glyph{f.sc}{1000}
277 \endsetglyph
278 \setrightkerning{ff.sc}{f.sc}{1000}
279 \setglyph{f_f.sc}
280 \glyph{ff.sc}{1000}
281 \endsetglyph
282 \setrightkerning{f_f.sc}{ff.sc}{1000}
283
284 \ifisglyph{i.sc}\then
285   \setglyph{fi.sc}
286   \glyph{f.sc}{1000}
287   \movert{\add{\kerning{f.sc}{i.sc}}{\int{smallcapspacing}}}
288   \glyph{i.sc}{1000}
289 \endsetglyph
290
291 %   \setleftkerning{fi.sc}{f.sc}{1000}
292 \setrightkerning{fi.sc}{i.sc}{1000}
293
294 \setglyph{f_i.sc}
295 \glyph{fi.sc}{1000}
296 \endsetglyph
297 \setrightkerning{f_i.sc}{fi.sc}{1000}
298
299 \setglyph{ffi.sc}
300 \glyph{ff.sc}{1000}
301 \movert{\add{\kerning{f.sc}{i.sc}}{\int{smallcapspacing}}}
302 \glyph{i.sc}{1000}
303 \endsetglyph
304
305 \setglyph{f_f_i.sc}
306 \glyph{ffi.sc}{1000}
307 \endsetglyph
308 \setrightkerning{f_f_i.sc}{ffi.sc}{1000}
309
310 %   \setleftkerning{ffi.sc}{f.sc}{1000}
311 \setrightkerning{ffi.sc}{i.sc}{1000}
312 \fi
313
314 \ifisglyph{l.sc}\then
315   \setglyph{fl.sc}
316   \glyph{f.sc}{1000}
317   \movert{\add{\kerning{f.sc}{l.sc}}{\int{smallcapspacing}}}
318   \glyph{l.sc}{1000}
319 \endsetglyph
320
321 %   \setleftkerning{fl.sc}{f.sc}{1000}
322 \setrightkerning{fl.sc}{l.sc}{1000}
323
324 \setglyph{f_l.sc}
325 \glyph{fl.sc}{1000}
326 \endsetglyph
327 \setrightkerning{f_l.sc}{fl.sc}{1000}
328
```

```

329   \setglyph{ffl.sc}
330     \glyph{ff.sc}{1000}
331     \movert{\add{\kerning{f.sc}{l.sc}}{\int{smallcapspacing}}}
332     \glyph{l.sc}{1000}
333   \endsetglyph
334
335 %   \setleftkerning{ffl.sc}{f.sc}{1000}
336   \setrightkerning{ffl.sc}{l.sc}{1000}
337
338   \setglyph{f_f_l.sc}
339   \glyph{ffl.sc}{1000}
340   \endsetglyph
341   \setrightkerning{f_f_l.sc}{ffl.sc}{1000}
342
343 \fi
344 \fi % ifisglyph{f.sc}
345
346
347 \ifareglyphs{i.sc,j.sc}\then
348   \setglyph{ij.sc}
349     \glyph{i.sc}{1000}
350     \movert{\add{\kerning{i.sc}{j.sc}}{\int{smallcapspacing}}}
351     \glyph{j.sc}{1000}
352   \endsetglyph
353 %   \setleftkerning{ij.sc}{i.sc}{1000}
354   \setrightkerning{ij.sc}{j.sc}{1000}
355 \fi
356
357 \ifisglyph{ss.sc}\then
358   \setglyph{germandbls.sc}
359   \glyph{ss.sc}{1000}
360   \endsetglyph
361   \setleftrightkerning{germandbls.sc}{ss.sc}{1000}
362 \Else
363   \ifisglyph{s.sc}\then
364     \setglyph{germandbls.sc}
365     \glyph{s.sc}{1000}
366     \movert{\add{\kerning{s.sc}{s.sc}}{\int{smallcapspacing}}}
367     \glyph{s.sc}{1000}
368   \endsetglyph
369   \setleftrightkerning{germandbls.sc}{s.sc}{1000}
370 \Fi
371 \Fi
372
373 \endmetrics

```

### 4.3 Encodings

None of these files are actually used in typesetting. Rather, they are converted to `.enc` files, renamed and automatically edited to ensure unique encoding names. These names are then substituted into `.map` files.

#### 4.3.1 dotoldstyle.etx

*dotoldstyle.etx* (*etx*)

```
374 \relax
375 \encoding
376 \setcommand\digit#1{#1.oldstyle}
377 \endencoding
```

#### 4.3.2 dotsc2.etx

*dotsc2.etx* (*etx*)

```
378 \relax
379
380 \encoding
381
382 \setcommand\lc#1#2{#2.sc}
383 \setcommand\uc#1#2{#1}
384 \setcommand\lctop#1#2{#2.sc}
385 \setcommand\uctop#1#2{#1}
386 \setcommand\lclig#1#2{#2.sc}
387 \setcommand\uclig#1#2{#1spaced}
388
389
390 \ifisint{capspacing}\then
391   \setint{letterspacing}{\int{capspacing}}
392 \fi
393
394 \endencoding
```

#### 4.3.3 dottaboldstyle.etx

*dottaboldstyle.etx* (*etx*)

```
395 \relax
396 \encoding
397 \setcommand\digit#1{#1.taboldstyle}
398 \endencoding
```

#### 4.3.4 lining.etx

*lining.etx* (*etx*)

```
399 \relax
400 \encoding
401 \setcommand\digit#1{#1lining}
402 \endencoding
```

#### 4.3.5 oldstyle.etcx

oldstyle.etcx (*etcx*)

```

403 \relax
404 \encoding
405 \setcommand{digit#1}{#1oldstyle}
406 \endencoding

```

#### 4.3.6 t1-cfr.etcx

t1-cfr.etcx (*etcx*)

```

407 %%
408 %% - The commentary in the original is deleted in this version. For
409 %% information about the T1 etc., typeset the original t1.etcx
410 %% included with fontinst.
411 %% - Slots are altered to accommodate characters which are named
412 %% differently. For example, this encoding uses "endash" and "emdash"
413 %% whereas t1.etcx called for "rangedash" and "punctdash".
414 %% - The original notices at the top of that file concerning authors,
415 %% maintenance etc. are replaced by this notice.
416 %% - The file is renamed.
417 %% - The encoding name is modified.
418 %%
419 %%\relax
420 \relax
421 \encoding
422 \needsfontinstversion{1.910}
424
425 \setcommand{lc#1#2}{#2}
426 \setcommand{uc#1#2}{#1}
427 \setcommand{lctop#1#2}{#2}
428 \setcommand{uctop#1#2}{#1}
429 \setcommand{lclig#1#2}{#2}
430 \ifisint{letterspacing}\then
431   \ifnumber{\int{letterspacing}}={0}\then \Else
432     \setcommand{uclig#1#2}{#1spaced}
433     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|#1spaced|, but
434     you can't see it as \verb|\verb|\setcommand| commands are invisible in
435     the typeset output.}
436   \Fi
437 \Fi
438 \setcommand{uclig#1#2}{#1}
439 \setcommand{digit#1}{#1}
440
441 \ifisint{monowidth}\then
442   \setint{ligaturing}{0}
443 \Else
444   % The following empty line is *important* to get the formatting
445   % right here (sigh)! (Remember that it is a \par token.)
446 \ifisint{letterspacing}\then

```

```

448     \ifnumber{\int{letterspacing}}={0}\then \Else
449         \setint{ligaturing}{0}
450     \Fi
451     \Fi
452     \setint{ligaturing}{1}
453 \Fi
454
455 \setint{italicslant}{0}
456 \setint{quad}{1000}
457 \setint{baselineskip}{1200}
458
459 \ifisglyph{x}\then
460     \setint{xheight}{\height{x}}
461 \Else
462     \setint{xheight}{500}
463 \Fi
464
465 \ifisglyph{space}\then
466     \setint{interword}{\width{space}}
467 \Else\ifisglyph{i}\then
468     \setint{interword}{\width{i}}
469 \Else
470     \setint{interword}{333}
471 \Fi\Fi
472
473 \ifisint{monowidth}\then
474     \setint{stretchword}{0}
475     \setint{shrinkword}{0}
476     \setint{extraspace}{\int{interword}}
477 \Else
478     \setint{stretchword}{\scale{\int{interword}}{600}}
479     \setint{shrinkword}{\scale{\int{interword}}{240}}
480     \setint{extraspace}{\scale{\int{interword}}{240}}
481 \Fi
482
483 \ifisglyph{X}\then
484     \setint{capheight}{\height{X}}
485 \Else
486     \setint{capheight}{750}
487 \Fi
488
489 \ifisglyph{d}\then
490     \setint{ascender}{\height{d}}
491 \Else\ifisint{capheight}\then
492     \setint{ascender}{\int{capheight}}
493 \Else
494     \setint{ascender}{750}
495 \Fi\Fi
496
497 \ifisglyph{Aring}\then
498     \setint{accicapheight}{\height{Aring}}
499 \Else
500     \setint{accicapheight}{999}
501 \Fi

```

```

502 \ifisint{descender_neg}\then
503   \setint{descender}{\neg{\int{descender_neg}}}
504 \Else\ifisglyph{p}\then
505   \setint{descender}{\depth{p}}
506 \Else
507   \setint{descender}{250}
508 \Fi\Fi
509
510
511 \ifisglyph{Aring}\then
512   \setint{maxheight}{\height{Aring}}
513 \Else
514   \setint{maxheight}{1000}
515 \Fi
516
517 \ifisint{maxdepth_neg}\then
518   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
519 \Else\ifisglyph{j}\then
520   \setint{maxdepth}{\depth{j}}
521 \Else
522   \setint{maxdepth}{250}
523 \Fi\Fi
524
525 \ifisglyph{six}\then
526   \setint{digitwidth}{\width{six}}
527 \Else
528   \setint{digitwidth}{500}
529 \Fi
530
531 \setint{capstem}{0} % not in AFM files
532
533 \setfontdimen{1}{italicslant}      % italic slant
534 \setfontdimen{2}{interword}        % interword space
535 \setfontdimen{3}{stretchword}     % interword stretch
536 \setfontdimen{4}{shrinkword}      % interword shrink
537 \setfontdimen{5}{xheight}         % x-height
538 \setfontdimen{6}{quad}            % quad
539 \setfontdimen{7}{extraspace}      % extra space after .
540 \setfontdimen{8}{capheight}       % cap height
541 \setfontdimen{9}{ascender}        % ascender
542 \setfontdimen{10}{accapheight}    % accented cap height
543 \setfontdimen{11}{descender}       % descender's depth
544 \setfontdimen{12}{maxheight}       % max height
545 \setfontdimen{13}{maxdepth}        % max depth
546 \setfontdimen{14}{digitwidth}      % digit width
547 \setfontdimen{15}{verticalstem}    % dominant width of vertical stems
548 \setfontdimen{16}{baselineskip}    % baselineskip
549
550 \ifnumber{\int{ligaturing}}<{0}\then
551   \comment{In this case, the codingscheme can be different from the
552   default, and therefore we refrain from setting it.}
553 \Else
554   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - LATIN CFR}
555 \Fi

```

```
556 \setslot{\lc{Grave}{grave}}
557   \comment{The grave accent '\`{}}.
558 \endsetslot
559
560 \setslot{\lc{Acute}{acute}}
561   \comment{The acute accent '\'{}}.
562 \endsetslot
563
564 \setslot{\lc{Circumflex}{circumflex}}
565   \comment{The circumflex accent '\^{}}.
566 \endsetslot
567
568 \setslot{\lc{Tilde}{tilde}}
569   \comment{The tilde accent '\~{}'}.
570 \endsetslot
571
572 \setslot{\lc{Dieresis}{dieresis}}
573   \comment{The umlaut or dieresis accent '\\"{}'}.
574 \endsetslot
575
576 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
577   \comment{The long Hungarian umlaut '\H{}'}.
578 \endsetslot
579
580 \setslot{\lc{Ring}{ring}}
581   \comment{The ring accent '\r{}'}.
582 \endsetslot
583
584 \setslot{\lc{Caron}{caron}}
585   \comment{The caron or h'áv cek accent '\v{}'}.
586 \endsetslot
587
588 \setslot{\lc{Breve}{breve}}
589   \comment{The breve accent '\u{}'}.
590 \endsetslot
591
592 \setslot{\lc{Macron}{macron}}
593   \comment{The macron accent '\={}}.
594 \endsetslot
595
596 \setslot{\lc{Dotaccent}{dotaccent}}
597   \comment{The dot accent '\.{}}.
598 \endsetslot
599
600 \setslot{\lc{Cedilla}{cedilla}}
601   \comment{The cedilla accent '\c {}'}.
602 \endsetslot
603
604 \setslot{\lc{Ogonek}{ogonek}}
605   \comment{The ogonek accent '\k {}'}.
606 \endsetslot
607
608 \setslot{quotesinglbase}
```

```

610   \comment{A German single quote mark ‘\quotesinglbase’ similar to a comma,
611       but with different sidebearings.}
612 \endsetslot
613
614 \setslot{guilsinglleft}
615   \comment{A French single opening quote mark ‘\guilsinglleft’,
616       unavailable in \plain\ \TeX.}
617 \endsetslot
618
619 \setslot{guilsinglright}
620   \comment{A French single closing quote mark ‘\guilsinglright’,
621       unavailable in \plain\ \TeX.}
622 \endsetslot
623
624 \setslot{quotedblleft}
625   \comment{The English opening quote mark ‘‘,\textquotedblleft\,’.}
626 \endsetslot
627
628 \setslot{quotedblright}
629   \comment{The English closing quote mark ‘‘,\textquotedblright\,’.}
630 \endsetslot
631
632 \setslot{quotedblbase}
633   \comment{A German double quote mark ‘\quotedblbase’ similar to two commas,
634       but with tighter letterspacing and different sidebearings.}
635 \endsetslot
636
637 \setslot{guillemotleft}
638   \comment{A French double opening quote mark ‘\guillemotleft’,
639       unavailable in \plain\ \TeX.}
640 \endsetslot
641
642 \setslot{guillemotright}
643   \comment{A French closing opening quote mark ‘\guillemotright’,
644       unavailable in \plain\ \TeX.}
645 \endsetslot
646
647 \setslot{endash}
648   \ligature{LIG}{hyphen}{emdash}
649   \comment{The number range dash ‘1--9’. This is called ‘rangedash’ by
650       fontinst’s t1.etx, but it needs to be called ‘endash’ to work right. The
651       ‘\textendash’. In a monowidth font, this might be set as
652       ‘\texttt{1{-}9}’.}
653 \endsetslot
654
655 \setslot{emdash}
656   \comment{The punctuation dash ‘Oh---boy.’ This is calle ‘punctdash’ by
657       fontinst’s t1.etx, but needs to be called ‘emdash’ to work right. The
658       ‘\textemdash’. In a monowidth font, this might be set as
659       ‘\texttt{Oh{-}{-}boy.}’}
660 \endsetslot
661
662 \setslot{compwordmark}
663   \comment{An invisible glyph, with zero width and depth, but the

```

```

664     height of lowercase letters without ascenders.
665     It is used to stop ligaturing in words like ‘shelf{}ful’.}
666 \endsetslot
667
668 \setslot{perthousandzero}
669   \comment{A glyph which is placed after ‘\%’ to produce a
670   ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
671   Your guess is as good as mine as to what this glyph should look
672   like in a monowidth font.}
673 \endsetslot
674
675 \setslot{\lc{dotlessI}{dotlessi}}
676   \comment{A dotless i ‘\i’, used to produce accented letters such as
677   ‘\=\i’.}
678 \endsetslot
679
680 \setslot{\lc{dotlessJ}{dotlessj}}
681   \comment{A dotless j ‘\j’, used to produce accented letters such as
682   ‘\=\j’. Most non-\TeX\ fonts do not have this glyph.}
683 \endsetslot
684
685 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{5}\Else
686
687 \setslot{\lclig{FF}{ff}}
688   \ifnumber{\int{ligaturing}}>{0}\then
689     \ligature{LIG}{\lc{I}{i}}{\lclig{FFI}{ffi}}
690     \ligature{LIG}{\lc{L}{l}}{\lclig{FFL}{ffl}}
691   \Fi
692   \comment{The ‘ff’ ligature. It should be two characters wide in a
693   monowidth font.}
694 \endsetslot
695
696 \setslot{\lclig{FI}{fi}}
697   \comment{The ‘fi’ ligature. It should be two characters wide in a
698   monowidth font.}
699 \endsetslot
700
701 \setslot{\lclig{FL}{fl}}
702   \comment{The ‘fl’ ligature. It should be two characters wide in a
703   monowidth font.}
704 \endsetslot
705
706 \setslot{\lclig{FFI}{ffi}}
707   \comment{The ‘ffi’ ligature. It should be three characters wide in a
708   monowidth font.}
709 \endsetslot
710
711 \setslot{\lclig{FFL}{ffl}}
712   \comment{The ‘ffl’ ligature. It should be three characters wide in a
713   monowidth font.}
714 \endsetslot
715
716 \Fi
717

```

```
718 \setslot{visiblespace}
719   \comment{A visible space glyph '\textvisiblespace'.}
720 \endsetslot
721
722 \setslot{exclam}
723   \ligature[LIG]{quotyleft}{exclamdown}
724   \comment{The exclamation mark '!'.}
725 \endsetslot
726
727 \setslot{quotedbl}
728   \comment{The 'neutral' double quotation mark '\textquotedbl',,
729     included for use in monowidth fonts, or for setting computer
730     programs. Note that the inclusion of this glyph in this slot
731     means that \TeX\ documents which used '{\tt\char"} as an
732     input character will no longer work.}
733 \endsetslot
734
735 \setslot{numbersign}
736   \comment{The hash sign '#'.}
737 \endsetslot
738
739 \setslot{dollar}
740   \comment{The dollar sign '$'.}
741 \endsetslot
742
743 \setslot{percent}
744   \comment{The percent sign '%'.}
745 \endsetslot
746
747 \setslot{ampersand}
748   \comment{The ampersand sign '&'.}
749 \endsetslot
750
751 \setslot{quoteright}
752   \ligature[LIG]{quoteright}{quotedblright}
753   \comment{The English closing single quote mark '\textquoteright'.}
754 \endsetslot
755
756 \setslot{parenleft}
757   \comment{The opening parenthesis '('.}
758 \endsetslot
759
760 \setslot{parenright}
761   \comment{The closing parenthesis ')'.}
762 \endsetslot
763
764 \setslot{asterisk}
765   \comment{The raised asterisk '*'.}
766 \endsetslot
767
768 \setslot{plus}
769   \comment{The addition sign '+'.}
770 \endsetslot
771
```

```
772 \setslot{comma}
773   \ligature{LIG}{comma}{quotedblbase}
774   \comment{The comma ','.}
775 \endsetslot
776
777 \setslot{hyphen}
778   \ligature{LIG}{hyphen}{endash}
779   \ligature{LIG}{hyphenchar}{hyphenchar}
780   \comment{The hyphen '-'.}
781 \endsetslot
782
783 \setslot{period}
784   \comment{The period '.'.}
785 \endsetslot
786
787 \setslot{slash}
788   \comment{The forward oblique '/'.}
789 \endsetslot
790
791 \setslot{\digit{zero}}
792   \comment{The number '0'. This (and all the other numerals) may be
793       old style or ranging digits.}
794 \endsetslot
795
796 \setslot{\digit{one}}
797   \comment{The number '1'.}
798 \endsetslot
799
800 \setslot{\digit{two}}
801   \comment{The number '2'.}
802 \endsetslot
803
804 \setslot{\digit{three}}
805   \comment{The number '3'.}
806 \endsetslot
807
808 \setslot{\digit{four}}
809   \comment{The number '4'.}
810 \endsetslot
811
812 \setslot{\digit{five}}
813   \comment{The number '5'.}
814 \endsetslot
815
816 \setslot{\digit{six}}
817   \comment{The number '6'.}
818 \endsetslot
819
820 \setslot{\digit{seven}}
821   \comment{The number '7'.}
822 \endsetslot
823
824 \setslot{\digit{eight}}
825   \comment{The number '8'.}
```

```
826 \endsetslot
827
828 \setslot{\digit{nine}}
829   \comment{The number '9'.}
830 \endsetslot
831
832 \setslot{colon}
833   \comment{The colon punctuation mark ':' .}
834 \endsetslot
835
836 \setslot{semicolon}
837   \comment{The semi-colon punctuation mark ';' .}
838 \endsetslot
839
840 \setslot{less}
841   \ligature[LIG]{less}{guillemotleft}
842   \comment{The less-than sign '\textless'.}
843 \endsetslot
844
845 \setslot{equal}
846   \comment{The equals sign '=' .}
847 \endsetslot
848
849 \setslot{greater}
850   \ligature[LIG]{greater}{guillemotright}
851   \comment{The greater-than sign '\textgreater'.}
852 \endsetslot
853
854 \setslot{question}
855   \ligature[LIG]{quotefirst}{questiondown}
856   \comment{The question mark '?'.}
857 \endsetslot
858
859 \setslot{at}
860   \comment{The at sign '@'.}
861 \endsetslot
862
863 \setslot{\uc{A}{a}}
864   \comment{The letter '{A}'.}
865 \endsetslot
866
867 \setslot{\uc{B}{b}}
868   \comment{The letter '{B}'.}
869 \endsetslot
870
871 \setslot{\uc{C}{c}}
872   \comment{The letter '{C}'.}
873 \endsetslot
874
875 \setslot{\uc{D}{d}}
876   \comment{The letter '{D}'.}
877 \endsetslot
878
879 \setslot{\uc{E}{e}}
```

```
880     \comment{The letter '{E}'.}
881     \endsetslot
882
883 \setslot{\uc{F}{f}}
884     \comment{The letter '{F}'.}
885 \endsetslot
886
887 \setslot{\uc{G}{g}}
888     \comment{The letter '{G}'.}
889 \endsetslot
890
891 \setslot{\uc{H}{h}}
892     \comment{The letter '{H}'.}
893 \endsetslot
894
895 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
896
897 \setslot{\uc{I}{i}}
898     \comment{The letter '{I}'.}
899 \endsetslot
900
901 \Fi
902
903 \setslot{\uc{J}{j}}
904     \comment{The letter '{J}'.}
905 \endsetslot
906
907 \setslot{\uc{K}{k}}
908     \comment{The letter '{K}'.}
909 \endsetslot
910
911 \setslot{\uc{L}{l}}
912     \comment{The letter '{L}'.}
913 \endsetslot
914
915 \setslot{\uc{M}{m}}
916     \comment{The letter '{M}'.}
917 \endsetslot
918
919 \setslot{\uc{N}{n}}
920     \comment{The letter '{N}'.}
921 \endsetslot
922
923 \setslot{\uc{O}{o}}
924     \comment{The letter '{O}'.}
925 \endsetslot
926
927 \setslot{\uc{P}{p}}
928     \comment{The letter '{P}'.}
929 \endsetslot
930
931 \setslot{\uc{Q}{q}}
932     \comment{The letter '{Q}'.}
933 \endsetslot
```

```
934 \setslot{\uc{R}{r}}
935   \comment{The letter '{R}'.}
936 \endsetslot
937
938 \setslot{\uc{S}{s}}
939   \comment{The letter '{S}'.}
940 \endsetslot
941
942 \setslot{\uc{T}{t}}
943   \comment{The letter '{T}'.}
944 \endsetslot
945
946 \setslot{\uc{U}{u}}
947   \comment{The letter '{U}'.}
948 \endsetslot
949
950 \setslot{\uc{V}{v}}
951   \comment{The letter '{V}'.}
952 \endsetslot
953
954 \setslot{\uc{W}{w}}
955   \comment{The letter '{W}'.}
956 \endsetslot
957
958 \setslot{\uc{X}{x}}
959   \comment{The letter '{X}'.}
960 \endsetslot
961
962 \setslot{\uc{Y}{y}}
963   \comment{The letter '{Y}'.}
964 \endsetslot
965
966 \setslot{\uc{Z}{z}}
967   \comment{The letter '{Z}'.}
968 \endsetslot
969
970 \setslot{bracketleft}
971   \comment{The opening square bracket '['.}
972 \endsetslot
973
974 \setslot{backslash}
975   \comment{The backwards oblique '\textbackslash'.}
976 \endsetslot
977
978 \setslot{bracketright}
979   \comment{The closing square bracket ']'.}
980 \endsetslot
981
982 \setslot{asciicircum}
983   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
984     This is included for compatibility with typewriter fonts used
985     for computer listings.}
986 \endsetslot
987
```

```

988 \setslot{underscore}
989   \comment{The ASCII underline character ‘\textunderscore’, usually
990     set on the baseline.
991     This is included for compatibility with typewriter fonts used
992     for computer listings.}
993 \endsetslot
994
995 \setslot{quotyleft}
996   \ligature{LIG}{quotyleft}{quotedblleft}
997   \comment{The English opening single quote mark ‘\,\textquotopleft\,’.}
998 \endsetslot
999
1000 \setslot{\lc{A}{a}}
1001   \comment{The letter ‘{a}’.}
1002 \endsetslot
1003
1004 \setslot{\lc{B}{b}}
1005   \comment{The letter ‘{b}’.}
1006 \endsetslot
1007
1008 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
1009
1010   \setslot{\lc{C}{c}}
1011     \comment{The letter ‘{c}’.}
1012   \endsetslot
1013
1014 \Fi
1015
1016 \setslot{\lc{D}{d}}
1017   \comment{The letter ‘{d}’.}
1018 \endsetslot
1019
1020 \setslot{\lc{E}{e}}
1021   \comment{The letter ‘{e}’.}
1022 \endsetslot
1023
1024 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
1025
1026   \setslot{\lc{F}{f}}
1027     \ifnumber{\int{ligaturing}}>{0}\then
1028       \ligature{LIG}{\lc{I}{i}}{\lc{lig{FI}}{fi}}
1029       \ligature{LIG}{\lc{F}{f}}{\lc{lig{FF}}{ff}}
1030       \ligature{LIG}{\lc{L}{l}}{\lc{lig{FL}}{fl}}
1031
1032     \Fi
1033     \comment{The letter ‘{f}’.}
1034   \endsetslot
1035
1036 \Fi
1037
1038 \setslot{\lc{G}{g}}
1039   \comment{The letter ‘{g}’.}
1040 \endsetslot
1041

```

```
1042 \setsheet{\lc{H}{h}}
1043   \comment{The letter '{h}'.}
1044 \endsetsheet
1045
1046 \ifnumber{\int{ligaturing}}<-1\then \skipslots{1}\Else
1047
1048   \setsheet{\lc{I}{i}}
1049   \comment{The letter '{i}'.}
1050 \endsetsheet
1051
1052 \Fi
1053
1054 \setsheet{\lc{J}{j}}
1055   \comment{The letter '{j}'.}
1056 \endsetsheet
1057
1058 \setsheet{\lc{K}{k}}
1059   \comment{The letter '{k}'.}
1060 \endsetsheet
1061
1062 \setsheet{\lc{L}{l}}
1063   \comment{The letter '{l}'.}
1064 \endsetsheet
1065
1066 \setsheet{\lc{M}{m}}
1067   \comment{The letter '{m}'.}
1068 \endsetsheet
1069
1070 \setsheet{\lc{N}{n}}
1071   \comment{The letter '{n}'.}
1072 \endsetsheet
1073
1074 \setsheet{\lc{O}{o}}
1075   \comment{The letter '{o}'.}
1076 \endsetsheet
1077
1078 \setsheet{\lc{P}{p}}
1079   \comment{The letter '{p}'.}
1080 \endsetsheet
1081
1082 \setsheet{\lc{Q}{q}}
1083   \comment{The letter '{q}'.}
1084 \endsetsheet
1085
1086 \setsheet{\lc{R}{r}}
1087   \comment{The letter '{r}'.}
1088 \endsetsheet
1089
1090 \ifnumber{\int{ligaturing}}<-1\then \skipslots{1}\Else
1091
1092   \setsheet{\lc{S}{s}}
1093   \comment{The letter '{s}'.}
1094 \endsetsheet
1095
```

```
1096 \Fi
1097
1098 \setslot{\lc{T}{t}}
1099   \comment{The letter '{t}'.}
1100 \endsetslot
1101
1102 \setslot{\lc{U}{u}}
1103   \comment{The letter '{u}'.}
1104 \endsetslot
1105
1106 \setslot{\lc{V}{v}}
1107   \comment{The letter '{v}'.}
1108 \endsetslot
1109
1110 \setslot{\lc{W}{w}}
1111   \comment{The letter '{w}'.}
1112 \endsetslot
1113
1114 \setslot{\lc{X}{x}}
1115   \comment{The letter '{x}'.}
1116 \endsetslot
1117
1118 \setslot{\lc{Y}{y}}
1119   \comment{The letter '{y}'.}
1120 \endsetslot
1121
1122 \setslot{\lc{Z}{z}}
1123   \comment{The letter '{z}'.}
1124 \endsetslot
1125
1126 \setslot{braceleft}
1127   \comment{The opening curly brace '\textbraceleft'.}
1128 \endsetslot
1129
1130 \setslot{bar}
1131   \comment{The ASCII vertical bar '\textbar'.
1132     This is included for compatibility with typewriter fonts used
1133     for computer listings.}
1134 \endsetslot
1135
1136 \setslot{braceright}
1137   \comment{The closing curly brace '\textbraceright'.}
1138 \endsetslot
1139
1140 \setslot{asciitilde}
1141   \comment{The ASCII tilde '\textasciitilde'.
1142     This is included for compatibility with typewriter fonts used
1143     for computer listings.}
1144 \endsetslot
1145
1146 \setslot{hyphenchar}
1147   \comment{The glyph used for hyphenation in this font, which will
1148     almost always be the same as 'hyphen'.}
1149 \endsetslot
```

```
1150 \setslot{\uctop{Abreve}{abreve}}
1151     \comment{The letter '\u00c1'.}
1152 \endsetslot
1153
1154 \setslot{\uc{Aogonek}{aogonek}}
1155     \comment{The letter '\u00e1'.}
1156 \endsetslot
1157
1158 \setslot{\uctop{Cacute}{cacute}}
1159     \comment{The letter '\u00c1'.}
1160 \endsetslot
1161
1162 \setslot{\uctop{Ccaron}{ccaron}}
1163     \comment{The letter '\u00e1'.}
1164 \endsetslot
1165
1166 \setslot{\uctop{Dcaron}{dcaron}}
1167     \comment{The letter '\u00e1'.}
1168 \endsetslot
1169
1170 \setslot{\uctop{Ecaron}{ecaron}}
1171     \comment{The letter '\u00e1'.}
1172 \endsetslot
1173
1174 \setslot{\uc{Eogonek}{eogonek}}
1175     \comment{The letter '\u00e1'.}
1176 \endsetslot
1177
1178 \setslot{\uctop{Gbreve}{gbreve}}
1179     \comment{The letter '\u00e1'.}
1180 \endsetslot
1181
1182 \setslot{\uctop{Lacute}{lacute}}
1183     \comment{The letter '\u00e1'.}
1184 \endsetslot
1185
1186 \setslot{\uc{Lcaron}{lcaron}}
1187     \comment{The letter '\u00e1'.}
1188 \endsetslot
1189
1190 \setslot{\uc{Lslash}{lslash}}
1191     \comment{The letter '\u00e1'.}
1192 \endsetslot
1193
1194 \setslot{\uctop{Nacute}{nacute}}
1195     \comment{The letter '\u00e1'.}
1196 \endsetslot
1197
1198 \setslot{\uctop{Ncaron}{ncaron}}
1199     \comment{The letter '\u00e1'.}
1200 \endsetslot
1201
1202 \setslot{\uc{Eng}{eng}}
```

```

1204     \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX.
1205     This needs to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in
1206     most cases, it seems.}
1207 \endsetslot
1208
1209 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
1210     \comment{The letter '\H O'.}
1211 \endsetslot
1212
1213 \setslot{\uctop{Racute}{racute}}
1214     \comment{The letter '\ R'.}
1215 \endsetslot
1216
1217 \setslot{\uctop{Rcaron}{rcaron}}
1218     \comment{The letter '\v R'.}
1219 \endsetslot
1220
1221 \setslot{\uctop{Sacute}{sacute}}
1222     \comment{The letter '\v S'.}
1223 \endsetslot
1224
1225 \setslot{\uctop{Scaron}{scaron}}
1226     \comment{The letter '\v S'.}
1227 \endsetslot
1228
1229 \setslot{\uc{Scedilla}{scedilla}}
1230     \comment{The letter '\c S'.}
1231 \endsetslot
1232
1233 \setslot{\uctop{Tcaron}{tcaron}}
1234     \comment{The letter '\v T'.}
1235 \endsetslot
1236
1237 \setslot{\uc{Tcedilla}{tcedilla}}
1238     \comment{The letter '\c T'.}
1239 \endsetslot
1240
1241 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
1242     \comment{The letter '\H U'.}
1243 \endsetslot
1244
1245 \setslot{\uctop{Uring}{uring}}
1246     \comment{The letter '\r U'.}
1247 \endsetslot
1248
1249 \setslot{\uctop{Ydieresis}{ydieresis}}
1250     \comment{The letter '\Y'.}
1251 \endsetslot
1252
1253 \setslot{\uctop{Zacute}{zacute}}
1254     \comment{The letter '\ Z'.}
1255 \endsetslot
1256
1257 \setslot{\uctop{Zcaron}{zcaron}}

```

```

1258     \comment{The letter '\v Z'.}
1259     \endsetslot
1260
1261 \setslot{\uctop{Zdotaccent}{zdotaccent}}
1262     \comment{The letter '\. Z'.}
1263 \endsetslot
1264
1265 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
1266
1267     \setslot{\uclig{IJ}{ij}}
1268     \comment{The letter 'IJ'. This is a single letter, and in a
1269     monowidth font should ideally be one letter wide.}
1270 \endsetslot
1271
1272 \Fi
1273
1274 \setslot{\uctop{Idotaccent}{idotaccent}}
1275     \comment{The letter '\. I'.}
1276 \endsetslot
1277
1278 \setslot{\lc{Dbar}{dbar}}
1279     \comment{The letter '\dj'.}
1280 \endsetslot
1281
1282 \setslot{section}
1283     \comment{The section mark '\textsection'.}
1284 \endsetslot
1285
1286 \setslot{\lctop{Abreve}{abreve}}
1287     \comment{The letter '\u a'.}
1288 \endsetslot
1289
1290 \setslot{\lc{Aogonek}{aogonek}}
1291     \comment{The letter '\k a'.}
1292 \endsetslot
1293
1294 \setslot{\lctop{Cacute}{cacute}}
1295     \comment{The letter '\c c'.}
1296 \endsetslot
1297
1298 \setslot{\lctop{Ccaron}{ccaron}}
1299     \comment{The letter '\v c'.}
1300 \endsetslot
1301
1302 \setslot{\lctop{Dcaron}{dcaron}}
1303     \comment{The letter '\v d'.}
1304 \endsetslot
1305
1306 \setslot{\lctop{Ecaron}{ecaron}}
1307     \comment{The letter '\v e'.}
1308 \endsetslot
1309
1310 \setslot{\lc{Eogonek}{eogonek}}
1311     \comment{The letter '\k e'.}

```

```

1312 \endsetslot
1313
1314 \setslot{\lctop{Gbreve}{gbreve}}
1315   \comment{The letter '\u g'.}
1316 \endsetslot
1317
1318 \setslot{\lctop{Lacute}{lacute}}
1319   \comment{The letter '\l'.}
1320 \endsetslot
1321
1322 \setslot{\lc{Lcaron}{lcaron}}
1323   \comment{The letter '\v l'.}
1324 \endsetslot
1325
1326 \setslot{\lc{Lslash}{lslash}}
1327   \comment{The letter '\l'.}
1328 \endsetslot
1329
1330 \setslot{\lctop{Nacute}{nacute}}
1331   \comment{The letter '\n'.}
1332 \endsetslot
1333
1334 \setslot{\lctop{Ncaron}{ncaron}}
1335   \comment{The letter '\v n'.}
1336 \endsetslot
1337
1338 \setslot{\lc{Eng}{eng}}
1339   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
           to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
           it seems.}
1340 \endsetslot
1341
1342 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
1343   \comment{The letter '\H o'.}
1344 \endsetslot
1345
1346 \setslot{\lctop{Racute}{racute}}
1347   \comment{The letter '\r'.}
1348 \endsetslot
1349
1350 \setslot{\lctop{Rcaron}{rcaron}}
1351   \comment{The letter '\v r'.}
1352 \endsetslot
1353
1354 \setslot{\lctop{Sacute}{sacute}}
1355   \comment{The letter '\s'.}
1356 \endsetslot
1357
1358 \setslot{\lctop{Scaron}{scaron}}
1359   \comment{The letter '\v s'.}
1360 \endsetslot
1361
1362 \setslot{\lc{Scedilla}{scedilla}}
1363   \comment{The letter '\c s'.}

```

```

1364 \endsetslot
1365
1366 \setslot{\lctop{Tcaron}{tcaron}}
1367   \comment{The letter '\v t'.}
1368 \endsetslot
1369
1370 \setslot{\lc{Tcedilla}{tcedilla}}
1371   \comment{The letter '\c t'.}
1372 \endsetslot
1373
1374 \setslot{\lctop{Uhngarumlaut}{uhngarumlaut}}
1375   \comment{The letter '\H u'.}
1376 \endsetslot
1377
1378 \setslot{\lctop{Uring}{uring}}
1379   \comment{The letter '\r u'.}
1380 \endsetslot
1381
1382 \setslot{\lctop{Ydieresis}{ydieresis}}
1383   \comment{The letter '\y y'.}
1384 \endsetslot
1385
1386 \setslot{\lctop{Zacute}{zacute}}
1387   \comment{The letter '\z z'.}
1388 \endsetslot
1389
1390 \setslot{\lctop{Zcaron}{zcaron}}
1391   \comment{The letter '\v z'.}
1392 \endsetslot
1393
1394 \setslot{\lctop{Zdotaccent}{zdotaccent}}
1395   \comment{The letter '\. z'.}
1396 \endsetslot
1397
1398 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
1399
1400   \setslot{\lclig{IJ}{ij}}
1401     \comment{The letter 'ij'. This is a single letter, and in a
1402       monowidth font should ideally be one letter wide.}
1403 \endsetslot
1404
1405 \Fi
1406
1407 \setslot{exclamdown}
1408   \comment{The Spanish punctuation mark '!'.}
1409 \endsetslot
1410
1411 \setslot{questiondown}
1412   \comment{The Spanish punctuation mark '?'.}
1413 \endsetslot
1414
1415 \setslot{sterling}
1416   \comment{The British currency mark '\textsterling'.}
1417 \endsetslot

```

```
1418
1419 \setslot{\uctop{Agrave}{agrave}}
1420   \comment{The letter '\` A'.}
1421 \endsetslot
1422
1423 \setslot{\uctop{Aacute}{aacute}}
1424   \comment{The letter '\^ A'.}
1425 \endsetslot
1426
1427 \setslot{\uctop{Acircumflex}{acircumflex}}
1428   \comment{The letter '\~ A'.}
1429 \endsetslot
1430
1431 \setslot{\uctop{Atilde}{atilde}}
1432   \comment{The letter '\~ A'.}
1433 \endsetslot
1434
1435 \setslot{\uctop{Adieresis}{adieresis}}
1436   \comment{The letter '\" A'.}
1437 \endsetslot
1438
1439 \setslot{\uctop{Aring}{aring}}
1440   \comment{The letter '\r A'.}
1441 \endsetslot
1442
1443 \setslot{\uc{AE}{ae}}
1444   \comment{The letter '\AE'. This is a single letter, and should not be
faked with 'AE'.}
1445 \endsetslot
1446
1447 \setslot{\uc{Ccedilla}{ccedilla}}
1448   \comment{The letter '\c C'.}
1449 \endsetslot
1450
1451 \setslot{\uctop{Egrave}{egrave}}
1452   \comment{The letter '\` E'.}
1453 \endsetslot
1454
1455 \setslot{\uctop{Eacute}{eacute}}
1456   \comment{The letter '\^ E'.}
1457 \endsetslot
1458
1459 \setslot{\uctop{Ecircumflex}{ecircumflex}}
1460   \comment{The letter '\~ E'.}
1461 \endsetslot
1462
1463 \setslot{\uctop{Edieresis}{adieresis}}
1464   \comment{The letter '\\" E'.}
1465 \endsetslot
1466
1467 \setslot{\uctop{Igrave}{igrave}}
1468   \comment{The letter '\` I'.}
1469 \endsetslot
1470
1471
```

```
1472 \setslot{\uctop{Iacute}{iacute}}
1473   \comment{The letter '\` I'.}
1474 \endsetslot
1475
1476 \setslot{\uctop{Icircumflex}{icircumflex}}
1477   \comment{The letter '\^ I'.}
1478 \endsetslot
1479
1480 \setslot{\uctop{Idieresis}{idieresis}}
1481   \comment{The letter '\\" I'.}
1482 \endsetslot
1483
1484 \setslot{\uc{Eth}{eth}}
1485   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
1486       with a horizontal bar through the stem. It is unavailable
1487       in \plain\ \TeX.}
1488 \endsetslot
1489
1490 \setslot{\uctop{Ntilde}{ntilde}}
1491   \comment{The letter '\~ N'.}
1492 \endsetslot
1493
1494 \setslot{\uctop{Ograve}{ograve}}
1495   \comment{The letter '\` O'.}
1496 \endsetslot
1497
1498 \setslot{\uctop{Oacute}{oacute}}
1499   \comment{The letter '\` O'.}
1500 \endsetslot
1501
1502 \setslot{\uctop{Ocircumflex}{ocircumflex}}
1503   \comment{The letter '\^ O'.}
1504 \endsetslot
1505
1506 \setslot{\uctop{Otilde}{otilde}}
1507   \comment{The letter '\~ O'.}
1508 \endsetslot
1509
1510 \setslot{\uctop{Odieresis}{odieresis}}
1511   \comment{The letter '\\" O'.}
1512 \endsetslot
1513
1514 \setslot{\uc{OE}{oe}}
1515   \comment{The letter '\OE'. This is a single letter, and should not be
1516       faked with 'OE'.}
1517 \endsetslot
1518
1519 \setslot{\uc{Oslash}{oslash}}
1520   \comment{The letter '\O'.}
1521 \endsetslot
1522
1523 \setslot{\uctop{Ugrave}{ugrave}}
1524   \comment{The letter '\` U'.}
1525 \endsetslot
```

```

1526 \setslot{\uctop{Uacute}{uacute}}
1527   \comment{The letter '\u00d9 U'.}
1528 \endsetslot
1529
1530 \setslot{\uctop{Ucircumflex}{ucircumflex}}
1531   \comment{The letter '\u00d8 U'.}
1532 \endsetslot
1533
1534 \setslot{\uctop{Udieresis}{udieresis}}
1535   \comment{The letter '\u00d6 U'.}
1536 \endsetslot
1537
1538 \setslot{\uctop{Yacute}{yacute}}
1539   \comment{The letter '\u00d9 Y'.}
1540 \endsetslot
1541
1542 \setslot{\uc{Thorn}{thorn}}
1543   \comment{The Icelandic capital letter Thorn, similar to a 'P'
           with the bowl moved down. It is unavailable in \plain\ \TeX.}
1544 \endsetslot
1545
1546 \setslot{\uclig{SS}{germandbls}}
1547   \comment{The ligature 'SS', used to give an upper case '\ss'.
           In a monowidth font it should be two letters wide.}
1548 \endsetslot
1549
1550 \setslot{\lctop{Agrave}{agrave}}
1551   \comment{The letter '\u00e5 a'.}
1552 \endsetslot
1553
1554 \setslot{\lctop{Aacute}{aacute}}
1555   \comment{The letter '\u00e5 a'.}
1556 \endsetslot
1557
1558 \setslot{\lctop{Acircumflex}{acircumflex}}
1559   \comment{The letter '\u00e5 a'.}
1560 \endsetslot
1561
1562 \setslot{\lctop{Atilde}{atilde}}
1563   \comment{The letter '\u00e5 a'.}
1564 \endsetslot
1565
1566 \setslot{\lctop{Adieresis}{adieresis}}
1567   \comment{The letter '\u00e5 a'.}
1568 \endsetslot
1569
1570 \setslot{\lctop{Aring}{aring}}
1571   \comment{The letter '\u00e5 r a'.}
1572 \endsetslot
1573
1574 \setslot{\lc{AE}{ae}}
1575   \comment{The letter '\u00e5 ae'. This is a single letter, and should not be
           faked with 'ae'.}
1576
1577 \setslot{\lc{AE}{ae}}
1578   \comment{The letter '\u00e5 ae'. This is a single letter, and should not be
           faked with 'ae'.}
1579

```

```

1580 \endsetslot
1581
1582 \setslot{\lc{Ccedilla}{ccedilla}}
1583   \comment{The letter '\c c'.}
1584 \endsetslot
1585
1586 \setslot{\lctop{Egrave}{egrave}}
1587   \comment{The letter '\` e'.}
1588 \endsetslot
1589
1590 \setslot{\lctop{Eacute}{eacute}}
1591   \comment{The letter '\^ e'.}
1592 \endsetslot
1593
1594 \setslot{\lctop{Ecircumflex}{ecircumflex}}
1595   \comment{The letter '\~ e'.}
1596 \endsetslot
1597
1598 \setslot{\lctop{Edieresis}{edieresis}}
1599   \comment{The letter '\" e'.}
1600 \endsetslot
1601
1602 \setslot{\lctop{Igrave}{igrave}}
1603   \comment{The letter '\`i'.}
1604 \endsetslot
1605
1606 \setslot{\lctop{Iacute}{iacute}}
1607   \comment{The letter '\^i'.}
1608 \endsetslot
1609
1610 \setslot{\lctop{Icircumflex}{icircumflex}}
1611   \comment{The letter '\~i'.}
1612 \endsetslot
1613
1614 \setslot{\lctop{Idieresis}{idieresis}}
1615   \comment{The letter '\"i'.}
1616 \endsetslot
1617
1618 \setslot{\lc{Eth}{eth}}
1619   \comment{The Icelandic lowercase letter 'eth' similar to
1620     a '$\partial$' with an oblique bar through the stem.
1621     It is unavailable in \plain\ TeX.}
1622 \endsetslot
1623
1624 \setslot{\lctop{Ntilde}{ntilde}}
1625   \comment{The letter '\~ n'.}
1626 \endsetslot
1627
1628 \setslot{\lctop{Ograve}{ograve}}
1629   \comment{The letter '\` o'.}
1630 \endsetslot
1631
1632 \setslot{\lctop{Oacute}{oacute}}
1633   \comment{The letter '\^ o'.}

```

```

1634 \endsetslot
1635
1636 \setslot{\lctop{0circumflex}{ocircumflex}}
1637   \comment{The letter '\^ o'.}
1638 \endsetslot
1639
1640 \setslot{\lctop{0tilde}{otilde}}
1641   \comment{The letter '\~ o'.}
1642 \endsetslot
1643
1644 \setslot{\lctop{0dieresis}{odieresis}}
1645   \comment{The letter '\" o'.}
1646 \endsetslot
1647
1648 \setslot{\lc{OE}{oe}}
1649   \comment{The letter '\oe'. This is a single letter, and should not be
1650     faked with 'oe'.}
1651 \endsetslot
1652
1653 \setslot{\lc{0slash}{oslash}}
1654   \comment{The letter '\o'.}
1655 \endsetslot
1656
1657 \setslot{\lctop{Ugrave}{ugrave}}
1658   \comment{The letter '\` u'.}
1659 \endsetslot
1660
1661 \setslot{\lctop{Uacute}{uacute}}
1662   \comment{The letter '\uacute u'.}
1663 \endsetslot
1664
1665 \setslot{\lctop{Ucircumflex}{ucircumflex}}
1666   \comment{The letter '\^ u'.}
1667 \endsetslot
1668
1669 \setslot{\lctop{Udieresis}{udieresis}}
1670   \comment{The letter '\\" u'.}
1671 \endsetslot
1672
1673 \setslot{\lctop{Yacute}{yacute}}
1674   \comment{The letter '\uacute y'.}
1675 \endsetslot
1676
1677 \setslot{\lc{Thorn}{thorn}}
1678   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
1679     with an ascender rising from the stem. It is unavailable
1680     in \plain\ \TeX.}
1681 \endsetslot
1682
1683 \setslot{\lc{SS}{germandbls}}
1684   \comment{The letter '\ss'.}
1685 \endsetslot
1686
1687 \endencoding

```

#### 4.3.7 t1-dotalt-f\_f.etx

t1-dotalt-f\_f (etx)

```

1688 %%
1689 %% - The commentary in the original is deleted in this version. For
1690 %% information about the T1 etc., typeset the original t1.etx
1691 %% included with fontinst.
1692 %% - Slots are altered to accommodate characters which are named
1693 %% differently. For example, this encoding uses "endash" and "emdash"
1694 %% whereas t1.etx called for "rangedash" and "punctdash".
1695 %% - The original notices at the top of that file concerning authors,
1696 %% maintenance etc. are replaced by this notice.
1697 %% - The file is renamed.
1698 %% - The encoding name is modified.
1699 %% - f_f, f_f_i and f_f_l replace ff, ffi and ffl.
1700 %% - lc, uc and accented lc, uc are set to characters named "a.alt" etc.
1701 %%
1702 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
1703 \relax
1704 \encoding
1705
1706 \needsfontinstversion{1.910}
1707
1708 \setcommand\lc#1#2{\#2.alt}
1709 \setcommand\uc#1#2{\#1.alt}
1710 \setcommand\lctop#1#2{\#2.alt}
1711 \setcommand\uctop#1#2{\#1.alt}
1712 \setcommand\lclig#1#2{\#2}
1713 \ifisint{letterspacing}\then
1714     \ifnumber{\int{letterspacing}}={0}\then \Else
1715         \setcommand\uclig#1#2{\#1spaced}
1716         \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
1717             you can't see it as \verb|\verb|\setcommand| commands are invisible in
1718             the typeset output.}
1719     \Fi
1720 \Fi
1721 \setcommand\uclig#1#2{\#1}
1722 \setcommand\digit#1{\#1}
1723
1724 \ifisint{monowidth}\then
1725     \setint{ligaturing}{0}
1726 \Else
1727     % The following empty line is *important* to get the formatting
1728     % right here (sigh)! (Remember that it is a \par token.)
1729
1730 \ifisint{letterspacing}\then
1731     \ifnumber{\int{letterspacing}}={0}\then \Else
1732         \setint{ligaturing}{0}
1733     \Fi
1734 \Fi
1735 \setint{ligaturing}{1}
1736 \Fi
1737

```

```

1738 \setint{italicslant}{0}
1739 \setint{quad}{1000}
1740 \setint{baselineskip}{1200}
1741
1742 \ifisglyph{x}\then
1743   \setint{xheight}{\height{x}}
1744 \Else
1745   \setint{xheight}{500}
1746 \Fi
1747
1748 \ifisglyph{space}\then
1749   \setint{interword}{\width{space}}
1750 \Else\ifisglyph{i}\then
1751   \setint{interword}{\width{i}}
1752 \Else
1753   \setint{interword}{333}
1754 \Fi\Fi
1755
1756 \ifisint{monowidth}\then
1757   \setint{stretchword}{0}
1758   \setint{shrinkword}{0}
1759   \setint{extraspace}{\int{interword}}
1760 \Else
1761   \setint{stretchword}{\scale{\int{interword}}{600}}
1762   \setint{shrinkword}{\scale{\int{interword}}{240}}
1763   \setint{extraspace}{\scale{\int{interword}}{240}}
1764 \Fi
1765
1766 \ifisglyph{X}\then
1767   \setint{capheight}{\height{X}}
1768 \Else
1769   \setint{capheight}{750}
1770 \Fi
1771
1772 \ifisglyph{d}\then
1773   \setint{ascender}{\height{d}}
1774 \Else\ifisint{capheight}\then
1775   \setint{ascender}{\int{capheight}}
1776 \Else
1777   \setint{ascender}{750}
1778 \Fi\Fi
1779
1780 \ifisglyph{Aring}\then
1781   \setint{acccapheight}{\height{Aring}}
1782 \Else
1783   \setint{acccapheight}{999}
1784 \Fi
1785
1786 \ifisint{descender_neg}\then
1787   \setint{descender}{\neg{\int{descender_neg}}}
1788 \Else\ifisglyph{p}\then
1789   \setint{descender}{\depth{p}}
1790 \Else
1791   \setint{descender}{250}

```

```

1792 \Fi\Fi
1793
1794 \ifisglyph{Aring}\then
1795   \setint{maxheight}{\height{Aring}}
1796 \Else
1797   \setint{maxheight}{1000}
1798 \Fi
1799
1800 \ifisint{maxdepth_neg}\then
1801   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
1802 \Else\ifisglyph{j}\then
1803   \setint{maxdepth}{\depth{j}}
1804 \Else
1805   \setint{maxdepth}{250}
1806 \Fi\Fi
1807
1808 \ifisglyph{six}\then
1809   \setint{digitwidth}{\width{six}}
1810 \Else
1811   \setint{digitwidth}{500}
1812 \Fi
1813
1814 \setint{capstem}{0} % not in AFM files
1815
1816 \setfontdimen{1}{italicslant}      % italic slant
1817 \setfontdimen{2}{interword}        % interword space
1818 \setfontdimen{3}{stretchword}      % interword stretch
1819 \setfontdimen{4}{shrinkword}       % interword shrink
1820 \setfontdimen{5}{xheight}         % x-height
1821 \setfontdimen{6}{quad}            % quad
1822 \setfontdimen{7}{extraspace}       % extra space after .
1823 \setfontdimen{8}{capheight}        % cap height
1824 \setfontdimen{9}{ascender}         % ascender
1825 \setfontdimen{10}{accapheight}     % accented cap height
1826 \setfontdimen{11}{descender}        % descender's depth
1827 \setfontdimen{12}{maxheight}        % max height
1828 \setfontdimen{13}{maxdepth}         % max depth
1829 \setfontdimen{14}{digitwidth}        % digit width
1830 \setfontdimen{15}{verticalstem}     % dominant width of vertical stems
1831 \setfontdimen{16}{baselineskip}      % baselineskip
1832
1833 \ifnumber{\int{ligaturing}}<{0}\then
1834   \comment{In this case, the codingscheme can be different from the
1835   default, and therefore we refrain from setting it.}
1836 \Else
1837   \setstr{codingscheme}{EXTENDED TEX ENC - DOTALT F_F}
1838 \Fi
1839
1840 \setslot{\lc{Grave}{grave}}
1841   \comment{The grave accent '\{}.\}
1842 \endsetslot
1843
1844 \setslot{\lc{Acute}{acute}}
1845   \comment{The acute accent '\{}.\}

```

```

1846 \endsetslot
1847
1848 \setslot{\lc{Circumflex}{circumflex}}
1849   \comment{The circumflex accent '\^{}' .}
1850 \endsetslot
1851
1852 \setslot{\lc{Tilde}{tilde}}
1853   \comment{The tilde accent '\~{}' .}
1854 \endsetslot
1855
1856 \setslot{\lc{Dieresis}{dieresis}}
1857   \comment{The umlaut or dieresis accent '\\"{}' .}
1858 \endsetslot
1859
1860 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
1861   \comment{The long Hungarian umlaut '\H{}' .}
1862 \endsetslot
1863
1864 \setslot{\lc{Ring}{ring}}
1865   \comment{The ring accent '\r{}' .}
1866 \endsetslot
1867
1868 \setslot{\lc{Caron}{caron}}
1869   \comment{The caron or h\`a\v cek accent '\v{}' .}
1870 \endsetslot
1871
1872 \setslot{\lc{Breve}{breve}}
1873   \comment{The breve accent '\u{}' .}
1874 \endsetslot
1875
1876 \setslot{\lc{Macron}{macron}}
1877   \comment{The macron accent '\={}' .}
1878 \endsetslot
1879
1880 \setslot{\lc{Dotaccent}{dotaccent}}
1881   \comment{The dot accent '\.{.}' .}
1882 \endsetslot
1883
1884 \setslot{\lc{Cedilla}{cedilla}}
1885   \comment{The cedilla accent '\c {}' .}
1886 \endsetslot
1887
1888 \setslot{\lc{Ogonek}{ogonek}}
1889   \comment{The ogonek accent '\k {}' .}
1890 \endsetslot
1891
1892 \setslot{quotesinglbase}
1893   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
1894       but with different sidebearings.}
1895 \endsetslot
1896
1897 \setslot{guilsinglleft}
1898   \comment{A French single opening quote mark '\guilsinglleft',
1899       unavailable in \plain\ \TeX.}

```

```

1900 \endsetslot
1901
1902 \setslot{guilsinglright}
1903   \comment{A French single closing quote mark ‘\guilsinglright’,
1904       unavailable in \plain\ \TeX.}
1905 \endsetslot
1906
1907 \setslot{quotedblleft}
1908   \comment{The English opening quote mark ‘\textquotedblleft\,’.}
1909 \endsetslot
1910
1911 \setslot{quotedblrigh}
1912   \comment{The English closing quote mark ‘\textquotedblrigh\,’.}
1913 \endsetslot
1914
1915 \setslot{quotedblbase}
1916   \comment{A German double quote mark ‘\quotedblbase’ similar to two commas,
1917       but with tighter letterspacing and different sidebearings.}
1918 \endsetslot
1919
1920 \setslot{guillemotleft}
1921   \comment{A French double opening quote mark ‘\guillemotleft’,
1922       unavailable in \plain\ \TeX.}
1923 \endsetslot
1924
1925 \setslot{guillemotright}
1926   \comment{A French closing opening quote mark ‘\guillemotright’,
1927       unavailable in \plain\ \TeX.}
1928 \endsetslot
1929
1930 \setslot{endash}
1931   \ligature{LIG}{hyphen}{emdash}
1932   \comment{The number range dash ‘1--9’.
1933       This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
1934       called ‘endash’ to work right.
1935       The ‘\textendash’. In a monowidth font, this might be set as
1936       ‘\texttt{1{-}9}’.}
1937 \endsetslot
1938
1939 \setslot{emdash}
1940   \comment{The punctuation dash ‘Oh---boy.’
1941       This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
1942       called ‘emdash’ to work right.
1943       The ‘\textemdash’.
1944       In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy.}’}
1945 \endsetslot
1946
1947 \setslot{compwordmark}
1948   \comment{An invisible glyph, with zero width and depth, but the
1949       height of lowercase letters without ascenders.
1950       It is used to stop ligaturing in words like ‘shelf{}ful’.}
1951 \endsetslot
1952
1953 \setslot{perthousandzero}

```

```

1954 \comment{A glyph which is placed after '\%' to produce a
1955     'per-thousand', or twice to produce 'per-ten-thousand'.
1956     Your guess is as good as mine as to what this glyph should look
1957     like in a monowidth font.}
1958 \endsetslot
1959
1960 \setslot{\lc{dotlessI}{dotlessi}}
1961     \comment{A dotless i 'i', used to produce accented letters such as
1962         '\=i'.}
1963 \endsetslot
1964
1965 \setslot{\lc{dotlessJ}{dotlessj}}
1966     \comment{A dotless j 'j', used to produce accented letters such as
1967         '\=j'. Most non-\TeX\ fonts do not have this glyph.}
1968 \endsetslot
1969
1970 \ifnumber{\int{ligaturing}}<0\then \skipslots{5}\Else
1971
1972 \setslot{\lc{lig{FF}{f_f}}}
1973     \ifnumber{\int{ligaturing}}>0\then
1974         \ligature{LIG}{\lc{I}{i}}{\lc{lig{FFI}{f_f_i}}}
1975         \ligature{LIG}{\lc{L}{l}}{\lc{lig{FFL}{f_f_l}}}
1976     \Fi
1977     \comment{The 'ff' ligature. It should be two characters wide in a
1978         monowidth font.}
1979 \endsetslot
1980
1981 \setslot{\lc{lig{FI}{fi}}}
1982     \comment{The 'fi' ligature. It should be two characters wide in a
1983         monowidth font.}
1984 \endsetslot
1985
1986 \setslot{\lc{lig{FL}{f_l}}}
1987     \comment{The 'fl' ligature. It should be two characters wide in a
1988         monowidth font.}
1989 \endsetslot
1990
1991 \setslot{\lc{lig{FFI}{f_f_i}}}
1992     \comment{The 'ffi' ligature. It should be three characters wide in a
1993         monowidth font.}
1994 \endsetslot
1995
1996 \setslot{\lc{lig{FFL}{f_f_l}}}
1997     \comment{The 'ffl' ligature. It should be three characters wide in a
1998         monowidth font.}
1999 \endsetslot
2000
2001 \Fi
2002
2003 \setslot{visiblespace}
2004     \comment{A visible space glyph '\textvisiblespace'.}
2005 \endsetslot
2006
2007 \setslot{exclam}

```

```
2008     \ligature{LIG}{quotyleft}{exclamdown}
2009     \comment{The exclamation mark '!'.}
2010 \endsetslot
2011
2012 \setslot{quotedbl}
2013   \comment{The 'neutral' double quotation mark '\,\textquotedbl\,', included for use in monowidth fonts, or for setting computer programs. Note that the inclusion of this glyph in this slot means that \TeX documents which used '{\tt\char'" as an input character will no longer work.}
2017
2018 \endsetslot
2019
2020 \setslot{numbersign}
2021   \comment{The hash sign '#'.}
2022 \endsetslot
2023
2024 \setslot{dollar}
2025   \comment{The dollar sign '$'.}
2026 \endsetslot
2027
2028 \setslot{percent}
2029   \comment{The percent sign '%'.}
2030 \endsetslot
2031
2032 \setslot{ampersand}
2033   \comment{The ampersand sign '&'.}
2034 \endsetslot
2035
2036 \setslot{quoteright}
2037   \ligature{LIG}{quoteright}{quotedblright}
2038   \comment{The English closing single quote mark '\,\textquoteright\,'.}
2039 \endsetslot
2040
2041 \setslot{parenleft}
2042   \comment{The opening parenthesis '('.}
2043 \endsetslot
2044
2045 \setslot{parenright}
2046   \comment{The closing parenthesis ')'.}
2047 \endsetslot
2048
2049 \setslot{asterisk}
2050   \comment{The raised asterisk '*'.}
2051 \endsetslot
2052
2053 \setslot{plus}
2054   \comment{The addition sign '+'.}
2055 \endsetslot
2056
2057 \setslot{comma}
2058   \ligature{LIG}{comma}{quotedblbase}
2059   \comment{The comma ','.}
2060 \endsetslot
2061
```

```
2062 \setslot{hyphen}
2063   \ligature{LIG}{hyphen}{endash}
2064   \ligature{LIG}{hyphenchar}{hyphenchar}
2065   \comment{The hyphen '-' .}
2066 \endsetslot
2067
2068 \setslot{period}
2069   \comment{The period '.' .}
2070 \endsetslot
2071
2072 \setslot{slash}
2073   \comment{The forward oblique '/' .}
2074 \endsetslot
2075
2076 \setslot{\digit{zero}}
2077   \comment{The number '0'. This (and all the other numerals) may be
2078       old style or ranging digits.}
2079 \endsetslot
2080
2081 \setslot{\digit{one}}
2082   \comment{The number '1' .}
2083 \endsetslot
2084
2085 \setslot{\digit{two}}
2086   \comment{The number '2' .}
2087 \endsetslot
2088
2089 \setslot{\digit{three}}
2090   \comment{The number '3' .}
2091 \endsetslot
2092
2093 \setslot{\digit{four}}
2094   \comment{The number '4' .}
2095 \endsetslot
2096
2097 \setslot{\digit{five}}
2098   \comment{The number '5' .}
2099 \endsetslot
2100
2101 \setslot{\digit{six}}
2102   \comment{The number '6' .}
2103 \endsetslot
2104
2105 \setslot{\digit{seven}}
2106   \comment{The number '7' .}
2107 \endsetslot
2108
2109 \setslot{\digit{eight}}
2110   \comment{The number '8' .}
2111 \endsetslot
2112
2113 \setslot{\digit{nine}}
2114   \comment{The number '9' .}
2115 \endsetslot
```

```
2116 \setslot{colon}
2117   \comment{The colon punctuation mark `:`.}
2118 \endsetslot
2119
2120 \setslot{semicolon}
2121   \comment{The semi-colon punctuation mark `;'.}
2122 \endsetslot
2123
2124 \setslot{less}
2125   \ligature[LIG]{less}{guillemotleft}
2126   \comment{The less-than sign `<'.}
2127 \endsetslot
2128
2129 \setslot{equal}
2130   \comment{The equals sign `='.}
2131 \endsetslot
2132
2133 \setslot{greater}
2134   \ligature[LIG]{greater}{guillemotright}
2135   \comment{The greater-than sign `>'.}
2136 \endsetslot
2137
2138 \setslot{question}
2139   \ligature[LIG]{quotelleft}{questiondown}
2140   \comment{The question mark `?'.}
2141 \endsetslot
2142
2143 \setslot{at}
2144   \comment{The at sign `@'.}
2145 \endsetslot
2146
2147 \setslot{\uc{A}{a}}
2148   \comment{The letter '{A}'.}
2149 \endsetslot
2150
2151 \setslot{\uc{B}{b}}
2152   \comment{The letter '{B}'.}
2153 \endsetslot
2154
2155 \setslot{\uc{C}{c}}
2156   \comment{The letter '{C}'.}
2157 \endsetslot
2158
2159 \setslot{\uc{D}{d}}
2160   \comment{The letter '{D}'.}
2161 \endsetslot
2162
2163 \setslot{\uc{E}{e}}
2164   \comment{The letter '{E}'.}
2165 \endsetslot
2166
2167 \setslot{\uc{F}{f}}
2168   \comment{The letter '{F}'.}
2169 \endsetslot
```

```

2170 \endsetslot
2171
2172 \setslot{\uc{G}{g}}
2173   \comment{The letter '{G}'.}
2174 \endsetslot
2175
2176 \setslot{\uc{H}{h}}
2177   \comment{The letter '{H}'.}
2178 \endsetslot
2179
2180 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2181
2182 \setslot{\uc{I}{i}}
2183   \comment{The letter '{I}'.}
2184 \endsetslot
2185
2186 \Fi
2187
2188 \setslot{\uc{J}{j}}
2189   \comment{The letter '{J}'.}
2190 \endsetslot
2191
2192 \setslot{\uc{K}{k}}
2193   \comment{The letter '{K}'.}
2194 \endsetslot
2195
2196 \setslot{\uc{L}{l}}
2197   \comment{The letter '{L}'.}
2198 \endsetslot
2199
2200 \setslot{\uc{M}{m}}
2201   \comment{The letter '{M}'.}
2202 \endsetslot
2203
2204 \setslot{\uc{N}{n}}
2205   \comment{The letter '{N}'.}
2206 \endsetslot
2207
2208 \setslot{\uc{O}{o}}
2209   \comment{The letter '{O}'.}
2210 \endsetslot
2211
2212 \setslot{\uc{P}{p}}
2213   \comment{The letter '{P}'.}
2214 \endsetslot
2215
2216 \setslot{\uc{Q}{q}}
2217   \comment{The letter '{Q}'.}
2218 \endsetslot
2219
2220 \setslot{\uc{R}{r}}
2221   \comment{The letter '{R}'.}
2222 \endsetslot
2223

```

```
2224 \setslot{\uc{S}{s}}
2225   \comment{The letter '{S}'.}
2226 \endsetslot
2227
2228 \setslot{\uc{T}{t}}
2229   \comment{The letter '{T}'.}
2230 \endsetslot
2231
2232 \setslot{\uc{U}{u}}
2233   \comment{The letter '{U}'.}
2234 \endsetslot
2235
2236 \setslot{\uc{V}{v}}
2237   \comment{The letter '{V}'.}
2238 \endsetslot
2239
2240 \setslot{\uc{W}{w}}
2241   \comment{The letter '{W}'.}
2242 \endsetslot
2243
2244 \setslot{\uc{X}{x}}
2245   \comment{The letter '{X}'.}
2246 \endsetslot
2247
2248 \setslot{\uc{Y}{y}}
2249   \comment{The letter '{Y}'.}
2250 \endsetslot
2251
2252 \setslot{\uc{Z}{z}}
2253   \comment{The letter '{Z}'.}
2254 \endsetslot
2255
2256 \setslot{bracketleft}
2257   \comment{The opening square bracket '['.}
2258 \endsetslot
2259
2260 \setslot{backslash}
2261   \comment{The backwards oblique '\textbackslash'.}
2262 \endsetslot
2263
2264 \setslot{bracketright}
2265   \comment{The closing square bracket ']'.}
2266 \endsetslot
2267
2268 \setslot{asciicircum}
2269   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
2270     This is included for compatibility with typewriter fonts used
2271     for computer listings.}
2272 \endsetslot
2273
2274 \setslot{underscore}
2275   \comment{The ASCII underline character '\textunderline', usually
2276     set on the baseline.
2277     This is included for compatibility with typewriter fonts used}
```

```

2278     for computer listings.}
2279 \endsetslot
2280
2281 \setslot{quotyleft}
2282   \ligature[LIG]{quotyleft}{quotedblleft}
2283   \comment{The English opening single quote mark '\,\textquotleft\,'.}
2284 \endsetslot
2285
2286 \setslot{\lc{A}{a}}
2287   \comment{The letter '{a}'.}
2288 \endsetslot
2289
2290 \setslot{\lc{B}{b}}
2291   \comment{The letter '{b}'.}
2292 \endsetslot
2293
2294 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2295
2296   \setslot{\lc{C}{c}}
2297     \comment{The letter '{c}'.}
2298   \endsetslot
2299
2300 \Fi
2301
2302 \setslot{\lc{D}{d}}
2303   \comment{The letter '{d}'.}
2304 \endsetslot
2305
2306 \setslot{\lc{E}{e}}
2307   \comment{The letter '{e}'.}
2308 \endsetslot
2309
2310 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2311
2312   \setslot{\lc{F}{f}}
2313   \ifnumber{\int{ligaturing}}>{0}\then
2314     \ligature[LIG]{\lc{I}{i}}{\lclig{FI}{fi}}
2315     \ligature[LIG]{\lc{F}{f}}{\lclig{FF}{f_f}}
2316     \ligature[LIG]{\lc{L}{l}}{\lclig{FL}{fl}}
2317   \Fi
2318   \comment{The letter '{f}'.}
2319 \endsetslot
2320
2321 \Fi
2322
2323 \setslot{\lc{G}{g}}
2324   \comment{The letter '{g}'.}
2325 \endsetslot
2326
2327 \setslot{\lc{H}{h}}
2328   \comment{The letter '{h}'.}
2329 \endsetslot
2330
2331 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else

```

```
2332   \setslot{\lc{I}{i}}
2333     \comment{The letter '{i}'.}
2334   \endsetslot
2335
2336 \Fi
2337
2338 \setslot{\lc{J}{j}}
2339   \comment{The letter '{j}'.}
2340 \endsetslot
2341
2342 \setslot{\lc{K}{k}}
2343   \comment{The letter '{k}'.}
2344 \endsetslot
2345
2346 \setslot{\lc{L}{l}}
2347   \comment{The letter '{l}'.}
2348 \endsetslot
2349
2350 \setslot{\lc{M}{m}}
2351   \comment{The letter '{m}'.}
2352 \endsetslot
2353
2354 \setslot{\lc{N}{n}}
2355   \comment{The letter '{n}'.}
2356 \endsetslot
2357
2358 \setslot{\lc{O}{o}}
2359   \comment{The letter '{o}'.}
2360 \endsetslot
2361
2362 \setslot{\lc{P}{p}}
2363   \comment{The letter '{p}'.}
2364 \endsetslot
2365
2366 \setslot{\lc{Q}{q}}
2367   \comment{The letter '{q}'.}
2368 \endsetslot
2369
2370 \setslot{\lc{R}{r}}
2371   \comment{The letter '{r}'.}
2372 \endsetslot
2373
2374 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
2375
2376   \setslot{\lc{S}{s}}
2377     \comment{The letter '{s}'.}
2378   \endsetslot
2379
2380 \Fi
2381
2382 \setslot{\lc{T}{t}}
2383   \comment{The letter '{t}'.}
2384 \endsetslot
2385
```

```
2386 \setslot{\lc{U}{u}}
2387   \comment{The letter '{u}'.}
2388 \endsetslot
2389
2390 \setslot{\lc{V}{v}}
2391   \comment{The letter '{v}'.}
2392 \endsetslot
2393
2394 \setslot{\lc{W}{w}}
2395   \comment{The letter '{w}'.}
2396 \endsetslot
2397
2398 \setslot{\lc{X}{x}}
2399   \comment{The letter '{x}'.}
2400 \endsetslot
2401
2402 \setslot{\lc{Y}{y}}
2403   \comment{The letter '{y}'.}
2404 \endsetslot
2405
2406 \setslot{\lc{Z}{z}}
2407   \comment{The letter '{z}'.}
2408 \endsetslot
2409
2410 \setslot{braceleft}
2411   \comment{The opening curly brace '\textbraceleft'.}
2412 \endsetslot
2413
2414 \setslot{bar}
2415   \comment{The ASCII vertical bar '\textbar'.
2416     This is included for compatibility with typewriter fonts used
2417     for computer listings.}
2418 \endsetslot
2419
2420 \setslot{braceright}
2421   \comment{The closing curly brace '\textbraceright'.}
2422 \endsetslot
2423
2424 \setslot{asciitilde}
2425   \comment{The ASCII tilde '\textasciitilde'.
2426     This is included for compatibility with typewriter fonts used
2427     for computer listings.}
2428 \endsetslot
2429
2430 \setslot{hyphenchar}
2431   \comment{The glyph used for hyphenation in this font, which will
2432     almost always be the same as 'hyphen'.}
2433 \endsetslot
2434
2435 \setslot{\uctop{Abreve}{abreve}}
2436   \comment{The letter '\u A'.}
2437 \endsetslot
2438
2439
```

```

2440 \setslot{\uc{Aogonek}{aogonek}}
2441   \comment{The letter '\k A'.}
2442 \endsetslot
2443
2444 \setslot{\uctop{Cacute}{cacute}}
2445   \comment{The letter '\` C'.}
2446 \endsetslot
2447
2448 \setslot{\uctop{Ccaron}{ccaron}}
2449   \comment{The letter '\v C'.}
2450 \endsetslot
2451
2452 \setslot{\uctop{Dcaron}{dcaron}}
2453   \comment{The letter '\v D'.}
2454 \endsetslot
2455
2456 \setslot{\uctop{Ecaron}{ecaron}}
2457   \comment{The letter '\v E'.}
2458 \endsetslot
2459
2460 \setslot{\uc{Eogonek}{eogonek}}
2461   \comment{The letter '\k E'.}
2462 \endsetslot
2463
2464 \setslot{\uctop{Gbreve}{gbreve}}
2465   \comment{The letter '\u G'.}
2466 \endsetslot
2467
2468 \setslot{\uctop{Lacute}{lacute}}
2469   \comment{The letter '\` L'.}
2470 \endsetslot
2471
2472 \setslot{\uc{Lcaron}{lcaron}}
2473   \comment{The letter '\v L'.}
2474 \endsetslot
2475
2476 \setslot{\uc{Lslash}{lslash}}
2477   \comment{The letter '\L'.}
2478 \endsetslot
2479
2480 \setslot{\uctop{Nacute}{nacute}}
2481   \comment{The letter '\` N'.}
2482 \endsetslot
2483
2484 \setslot{\uctop{Ncaron}{ncaron}}
2485   \comment{The letter '\v N'.}
2486 \endsetslot
2487
2488 \setslot{\uc{Eng}{eng}}
2489   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
seems.}
2490 \endsetslot
2491

```

```
2492 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
2493   \comment{The letter '\H O'.}
2494 \endsetslot
2495
2496 \setslot{\uctop{Racute}{racute}}
2497   \comment{The letter '\R'.}
2498 \endsetslot
2499
2500 \setslot{\uctop{Rcaron}{rcaron}}
2501   \comment{The letter '\v R'.}
2502 \endsetslot
2503
2504 \setslot{\uctop{Sacute}{sacute}}
2505   \comment{The letter '\S'.}
2506 \endsetslot
2507
2508 \setslot{\uctop{Scaron}{scaron}}
2509   \comment{The letter '\v S'.}
2510 \endsetslot
2511
2512 \setslot{\uc{Scedilla}{scedilla}}
2513   \comment{The letter '\c S'.}
2514 \endsetslot
2515
2516 \setslot{\uctop{Tcaron}{tcaron}}
2517   \comment{The letter '\v T'.}
2518 \endsetslot
2519
2520 \setslot{\uc{Tcedilla}{tcedilla}}
2521   \comment{The letter '\c T'.}
2522 \endsetslot
2523
2524 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
2525   \comment{The letter '\H U'.}
2526 \endsetslot
2527
2528 \setslot{\uctop{Uring}{uring}}
2529   \comment{The letter '\r U'.}
2530 \endsetslot
2531
2532 \setslot{\uctop{Ydieresis}{ydieresis}}
2533   \comment{The letter '\Y'.}
2534 \endsetslot
2535
2536 \setslot{\uctop{Zacute}{zacute}}
2537   \comment{The letter '\Z'.}
2538 \endsetslot
2539
2540 \setslot{\uctop{Zcaron}{zcaron}}
2541   \comment{The letter '\v Z'.}
2542 \endsetslot
2543
2544 \setslot{\uctop{Zdotaccent}{zdotaccent}}
2545   \comment{The letter '\. Z'.
```

```
2546 \endsetslot
2547
2548 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
2549
2550   \setslot{\uclig{IJ}{ij}}
2551     \comment{The letter 'IJ'. This is a single letter, and in a
2552       monowidth font should ideally be one letter wide.}
2553   \endsetslot
2554
2555 \Fi
2556
2557 \setslot{\uctop{Idotaccent}{idotaccent}}
2558   \comment{The letter '\. I'.}
2559 \endsetslot
2560
2561 \setslot{\lc{Dbar}{dbar}}
2562   \comment{The letter '\dj'.}
2563 \endsetslot
2564
2565 \setslot{section}
2566   \comment{The section mark '\textsection'.}
2567 \endsetslot
2568
2569 \setslot{\lctop{Abreve}{abreve}}
2570   \comment{The letter '\u a'.}
2571 \endsetslot
2572
2573 \setslot{\lc{Aogonek}{aogonek}}
2574   \comment{The letter '\k a'.}
2575 \endsetslot
2576
2577 \setslot{\lctop{Cacute}{cacute}}
2578   \comment{The letter '\c c'.}
2579 \endsetslot
2580
2581 \setslot{\lctop{Ccaron}{ccaron}}
2582   \comment{The letter '\v c'.}
2583 \endsetslot
2584
2585 \setslot{\lctop{Dcaron}{dcaron}}
2586   \comment{The letter '\v d'.}
2587 \endsetslot
2588
2589 \setslot{\lctop{Ecaron}{ecaron}}
2590   \comment{The letter '\v e'.}
2591 \endsetslot
2592
2593 \setslot{\lc{Eogonek}{eogonek}}
2594   \comment{The letter '\k e'.}
2595 \endsetslot
2596
2597 \setslot{\lctop{Gbreve}{gbreve}}
2598   \comment{The letter '\u g'.}
2599 \endsetslot
```

```

2600 \setslot{\lctop{Lacute}{lacute}}
2601   \comment{The letter '\l'.}
2602 \endsetslot
2603
2604 \setslot{\lc{Lcaron}{lcaron}}
2605   \comment{The letter '\v l'.}
2606 \endsetslot
2607
2608 \setslot{\lc{Lslash}{lslash}}
2609   \comment{The letter '\l'.}
2610 \endsetslot
2611
2612 \setslot{\lctop{Nacute}{nacute}}
2613   \comment{The letter '\n'.}
2614 \endsetslot
2615
2616 \setslot{\lctop{Ncaron}{ncaron}}
2617   \comment{The letter '\v n'.}
2618 \endsetslot
2619
2620 \setslot{\lc{Eng}{eng}}
2621   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
2622     to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
2623     it seems.}
2624 \endsetslot
2625
2626 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
2627   \comment{The letter '\H o'.}
2628 \endsetslot
2629
2630 \setslot{\lctop{Racute}{racute}}
2631   \comment{The letter '\r'.}
2632 \endsetslot
2633
2634 \setslot{\lctop{Rcaron}{rcaron}}
2635   \comment{The letter '\v r'.}
2636 \endsetslot
2637
2638 \setslot{\lctop{Sacute}{sacute}}
2639   \comment{The letter '\s'.}
2640 \endsetslot
2641
2642 \setslot{\lctop{Scaron}{scaron}}
2643   \comment{The letter '\v s'.}
2644 \endsetslot
2645
2646 \setslot{\lc{Scedilla}{scedilla}}
2647   \comment{The letter '\c s'.}
2648 \endsetslot
2649
2650 \setslot{\lctop{Tcaron}{tcaron}}
2651   \comment{The letter '\v t'.}
2652 \endsetslot

```

```
2652 \setslot{\lc{Tcedilla}{tcedilla}}
2653   \comment{The letter '\c t'.}
2654 \endsetslot
2655
2656 \setslot{\lctop{Uhngarumlaut}{uhngarumlaut}}
2657   \comment{The letter '\H u'.}
2658 \endsetslot
2659
2660 \setslot{\lctop{Uring}{uring}}
2661   \comment{The letter '\r u'.}
2662 \endsetslot
2663
2664 \setslot{\lctop{Ydieresis}{ydieresis}}
2665   \comment{The letter '\" y'.}
2666 \endsetslot
2667
2668 \setslot{\lctop{Zacute}{zacute}}
2669   \comment{The letter '\` z'.}
2670 \endsetslot
2671
2672 \setslot{\lctop{Zcaron}{zcaron}}
2673   \comment{The letter '\v z'.}
2674 \endsetslot
2675
2676 \setslot{\lctop{Zdotaccent}{zdotaccent}}
2677   \comment{The letter '\. z'.}
2678 \endsetslot
2679
2680 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
2681
2682   \setslot{\lclig{IJ}{ij}}
2683     \comment{The letter 'ij'. This is a single letter, and in a
2684       monowidth font should ideally be one letter wide.}
2685   \endsetslot
2686
2687
2688 \Fi
2689
2690 \setslot{exclamdown}
2691   \comment{The Spanish punctuation mark '!'.}
2692 \endsetslot
2693
2694 \setslot{questiondown}
2695   \comment{The Spanish punctuation mark '?'.}
2696 \endsetslot
2697
2698 \setslot{sterling}
2699   \comment{The British currency mark '\textsterling'.}
2700 \endsetslot
2701
2702 \setslot{\uctop{Agrave}{agrade}}
2703   \comment{The letter '\` A'.}
2704 \endsetslot
2705
```

```
2706 \setslot{\uctop{Aacute}{aacute}}
2707   \comment{The letter '\` A'.}
2708 \endsetslot
2709
2710 \setslot{\uctop{Acircumflex}{acircumflex}}
2711   \comment{The letter '\^ A'.}
2712 \endsetslot
2713
2714 \setslot{\uctop{Atilde}{atilde}}
2715   \comment{The letter '\~ A'.}
2716 \endsetslot
2717
2718 \setslot{\uctop{Adieresis}{adieresis}}
2719   \comment{The letter '\" A'.}
2720 \endsetslot
2721
2722 \setslot{\uctop{Aring}{aring}}
2723   \comment{The letter '\r A'.}
2724 \endsetslot
2725
2726 \setslot{\uc{AE}{ae}}
2727   \comment{The letter '\AE'. This is a single letter, and should not be
faked with 'AE'.}
2728 \endsetslot
2729
2730 \setslot{\uc{Ccedilla}{ccedilla}}
2731   \comment{The letter '\c C'.}
2732 \endsetslot
2733
2734 \setslot{\uctop{Egrave}{egrave}}
2735   \comment{The letter '\` E'.}
2736 \endsetslot
2737
2738 \setslot{\uctop{Eacute}{eacute}}
2739   \comment{The letter '\` E'.}
2740 \endsetslot
2741
2742 \setslot{\uctop{Ecircumflex}{ecircumflex}}
2743   \comment{The letter '\^ E'.}
2744 \endsetslot
2745
2746 \setslot{\uctop{Edieresis}{edieresis}}
2747   \comment{The letter '\\" E'.}
2748 \endsetslot
2749
2750 \setslot{\uctop{Igrave}{igrave}}
2751   \comment{The letter '\` I'.}
2752 \endsetslot
2753
2754 \setslot{\uctop{Iacute}{iacute}}
2755   \comment{The letter '\` I'.}
2756 \endsetslot
2757
2758 \setslot{\uctop{Icircumflex}{icircumflex}}
```

```
2760     \comment{The letter '\^ I'.}
2761     \endsetslot
2762
2763 \setslot{\uctop{Idieresis}{idieresis}}
2764     \comment{The letter '\~ I'.}
2765 \endsetslot
2766
2767 \setslot{\uc{Eth}{eth}}
2768     \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
2769         with a horizontal bar through the stem. It is unavailable
2770         in \plain\ TeX.}
2771 \endsetslot
2772
2773 \setslot{\uctop{Ntilde}{ntilde}}
2774     \comment{The letter '\~ N'.}
2775 \endsetslot
2776
2777 \setslot{\uctop{Ograve}{ograve}}
2778     \comment{The letter '\` O'.}
2779 \endsetslot
2780
2781 \setslot{\uctop{Oacute}{oacute}}
2782     \comment{The letter '\` O'.}
2783 \endsetslot
2784
2785 \setslot{\uctop{Ocircumflex}{ocircumflex}}
2786     \comment{The letter '\^ O'.}
2787 \endsetslot
2788
2789 \setslot{\uctop{Otilde}{otilde}}
2790     \comment{The letter '\~ O'.}
2791 \endsetslot
2792
2793 \setslot{\uctop{Odieresis}{odieresis}}
2794     \comment{The letter '\~ O'.}
2795 \endsetslot
2796
2797 \setslot{\uc{OE}{oe}}
2798     \comment{The letter '\OE'. This is a single letter, and should not be
2799         faked with 'OE'.}
2800 \endsetslot
2801
2802 \setslot{\uc{Oslash}{oslash}}
2803     \comment{The letter '\O'.}
2804 \endsetslot
2805
2806 \setslot{\uctop{Ugrave}{ugrave}}
2807     \comment{The letter '\` U'.}
2808 \endsetslot
2809
2810 \setslot{\uctop{Uacute}{uacute}}
2811     \comment{The letter '\` U'.}
2812 \endsetslot
2813
```

```
2814 \setslot{\uctop{Ucircumflex}{ucircumflex}}
2815   \comment{The letter '\^ U'.}
2816 \endsetslot
2817
2818 \setslot{\uctop{Udieresis}{udieresis}}
2819   \comment{The letter '\u00f6 U'.}
2820 \endsetslot
2821
2822 \setslot{\uctop{Yacute}{yacute}}
2823   \comment{The letter '\u00c9 Y'.}
2824 \endsetslot
2825
2826 \setslot{\uc{Thorn}{thorn}}
2827   \comment{The Icelandic capital letter Thorn, similar to a 'P'
2828     with the bowl moved down. It is unavailable in \plain\ \TeX.}
2829 \endsetslot
2830
2831 \setslot{\uclig{SS}{germandbls}}
2832   \comment{The ligature 'SS', used to give an upper case '\ss'.
2833     In a monowidth font it should be two letters wide.}
2834 \endsetslot
2835
2836 \setslot{\lctop{Agrave}{agrave}}
2837   \comment{The letter '\u00e1 a'.}
2838 \endsetslot
2839
2840 \setslot{\lctop{Aacute}{aacute}}
2841   \comment{The letter '\u00e1 a'.}
2842 \endsetslot
2843
2844 \setslot{\lctop{Acircumflex}{acircumflex}}
2845   \comment{The letter '\u00e1 a'.}
2846 \endsetslot
2847
2848 \setslot{\lctop{Atilde}{atilde}}
2849   \comment{The letter '\u00e1 a'.}
2850 \endsetslot
2851
2852 \setslot{\lctop{Adieresis}{adieresis}}
2853   \comment{The letter '\u00f6 a'.}
2854 \endsetslot
2855
2856 \setslot{\lctop{Aring}{aring}}
2857   \comment{The letter '\u00e1 r a'.}
2858 \endsetslot
2859
2860 \setslot{\lc{AE}{ae}}
2861   \comment{The letter '\ae'. This is a single letter, and should not be
2862     faked with 'ae'.}
2863 \endsetslot
2864
2865 \setslot{\lc{Ccedilla}{ccedilla}}
2866   \comment{The letter '\u00e1 c c'.}
2867 \endsetslot
```

```
2868 \setslot{\lctop{Egrave}{egrave}}
2869   \comment{The letter '\`e'.}
2870 \endsetslot
2871
2872 \setslot{\lctop{Eacute}{eacute}}
2873   \comment{The letter '\^e'.}
2874 \endsetslot
2875
2876 \setslot{\lctop{Ecircumflex}{ecircumflex}}
2877   \comment{The letter '\~e'.}
2878 \endsetslot
2879
2880 \setslot{\lctop{Edieresis}{edieresis}}
2881   \comment{The letter '\u00f6'.}
2882 \endsetslot
2883
2884 \setslot{\lctop{Igrave}{igrave}}
2885   \comment{The letter '\i'.}
2886 \endsetslot
2887
2888 \setslot{\lctop{Iacute}{iacute}}
2889   \comment{The letter '\i'.}
2890 \endsetslot
2891
2892 \setslot{\lctop{Icircumflex}{icircumflex}}
2893   \comment{The letter '\^i'.}
2894 \endsetslot
2895
2896 \setslot{\lctop{Idieresis}{idieresis}}
2897   \comment{The letter '\u00fci'.}
2898 \endsetslot
2899
2900 \setslot{\lc{Eth}{eth}}
2901   \comment{The Icelandic lowercase letter 'eth' similar to
2902     a '$\partial$' with an oblique bar through the stem.
2903     It is unavailable in \plain\TeX.}
2904 \endsetslot
2905
2906 \setslot{\lctop{Ntilde}{ntilde}}
2907   \comment{The letter '\~n'.}
2908 \endsetslot
2909
2910 \setslot{\lctop{Ograve}{ograve}}
2911   \comment{The letter '\`o'.}
2912 \endsetslot
2913
2914 \setslot{\lctop{Oacute}{oacute}}
2915   \comment{The letter '\^o'.}
2916 \endsetslot
2917
2918 \setslot{\lctop{Ocircumflex}{ocircumflex}}
2919   \comment{The letter '\~o'.}
2920 \endsetslot
2921
```

```
2922
2923 \setslot{\lctop{Otilde}{otilde}}
2924   \comment{The letter '\~ o'.}
2925 \endsetslot
2926
2927 \setslot{\lctop{Odieresis}{odieresis}}
2928   \comment{The letter '\o'.}
2929 \endsetslot
2930
2931 \setslot{\lc{OE}{oe}}
2932   \comment{The letter '\oe'. This is a single letter, and should not be
2933     faked with 'oe'.}
2934 \endsetslot
2935
2936 \setslot{\lc{Oslash}{oslash}}
2937   \comment{The letter '\o'.}
2938 \endsetslot
2939
2940 \setslot{\lctop{Ugrave}{ugrave}}
2941   \comment{The letter '\` u'.}
2942 \endsetslot
2943
2944 \setslot{\lctop{Uacute}{uacute}}
2945   \comment{The letter '\u' u'.}
2946 \endsetslot
2947
2948 \setslot{\lctop{Ucircumflex}{ucircumflex}}
2949   \comment{The letter '\^ u'.}
2950 \endsetslot
2951
2952 \setslot{\lctop{Udieresis}{udieresis}}
2953   \comment{The letter '\u' u'.}
2954 \endsetslot
2955
2956 \setslot{\lctop{Yacute}{yacute}}
2957   \comment{The letter '\u' y'.}
2958 \endsetslot
2959
2960 \setslot{\lc{Thorn}{thorn}}
2961   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
2962     with an ascender rising from the stem. It is unavailable
2963     in \plain\ \TeX.}
2964 \endsetslot
2965
2966 \setslot{\lc{SS}{germandbls}}
2967   \comment{The letter '\ss'.}
2968 \endsetslot
2969
2970 \endencoding
```

#### 4.3.8 t1-dotinf.etx

t1-dotinf.etx (*etx*)

```

2971 %%
2972 %% - The original notices at the top of that file concerning authors,
2973 %% maintenance etc. are replaced by this notice.
2974 %% - The file is renamed.
2975 %% - The encoding name is modified.
2976 %% - The file is modified to accommodate differences in glyph names.
2977 %% - The file is modified for use in encoding inferiors.
2978 %%
2979 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
2980 \relax
2981 \encoding
2982
2983 \needsfontinstversion{1.910}
2984
2985 \setcommand\lc#1#2{\#2.inferior}
2986 \setcommand\uc#1#2{\#1.inferior}
2987 \setcommand\lctop#1#2{\#2.inferior}
2988 \setcommand\uctop#1#2{\#1.inferior}
2989 \setcommand\lcclig#1#2{\#2.inferior}
2990 \ifisint{letterspacing}\then
2991   \ifnumber{\int{letterspacing}}={0}\then \Else
2992     \setcommand\ucclig#1#2{\#1spaced}
2993     \comment{Here we set \verb|\ucclig#1#2| to \verb|\ucclig#1#2|, but
2994       you can't see it as \verb|\ucclig|\ commands are invisible in
2995       the typeset output.}
2996   \Fi
2997 \Fi
2998 \setcommand\ucclig#1#2{\#1.inferior}
2999 \setcommand\digit#1{\#1.inferior}
3000
3001 \ifisint{monowidth}\then
3002   \setint{ligaturing}{0}
3003 \Else
3004   % The following empty line is *important* to get the formatting
3005   % right here (sigh)! (Remember that it is a \par token.)
3006
3007   \ifisint{letterspacing}\then
3008     \ifnumber{\int{letterspacing}}={0}\then \Else
3009       \setint{ligaturing}{0}
3010     \Fi
3011   \Fi
3012   \setint{ligaturing}{1}
3013 \Fi
3014
3015 \setint{italicslant}{0}
3016 \setint{quad}{1000}
3017 \setint{baselineskip}{1200}
3018
3019 \ifisglyph{x}\then
3020   \setint{xheight}{\height{x}}

```

```

3021 \Else
3022   \setint{xheight}{500}
3023 \Fi
3024
3025 \ifisglyph{space}\then
3026   \setint{interword}{\width{space}}
3027 \Else\ifisglyph{i}\then
3028   \setint{interword}{\width{i}}
3029 \Else
3030   \setint{interword}{333}
3031 \Fi\Fi
3032
3033 \ifisint{monowidth}\then
3034   \setint{stretchword}{0}
3035   \setint{shrinkword}{0}
3036   \setint{extraspace}{\int{interword}}
3037 \Else
3038   \setint{stretchword}{\scale{\int{interword}}{600}}
3039   \setint{shrinkword}{\scale{\int{interword}}{240}}
3040   \setint{extraspace}{\scale{\int{interword}}{240}}
3041 \Fi
3042
3043 \ifisglyph{X}\then
3044   \setint{capheight}{\height{X}}
3045 \Else
3046   \setint{capheight}{750}
3047 \Fi
3048
3049 \ifisglyph{d}\then
3050   \setint{ascender}{\height{d}}
3051 \Else\ifisint{capheight}\then
3052   \setint{ascender}{\int{capheight}}
3053 \Else
3054   \setint{ascender}{750}
3055 \Fi\Fi
3056
3057 \ifisglyph{Aring}\then
3058   \setint{accicapheight}{\height{Aring}}
3059 \Else
3060   \setint{accicapheight}{999}
3061 \Fi
3062
3063 \ifisint{descender_neg}\then
3064   \setint{descender}{\neg{\int{descender_neg}}}
3065 \Else\ifisglyph{p}\then
3066   \setint{descender}{\depth{p}}
3067 \Else
3068   \setint{descender}{250}
3069 \Fi\Fi
3070
3071 \ifisglyph{Aring}\then
3072   \setint{maxheight}{\height{Aring}}
3073 \Else
3074   \setint{maxheight}{1000}

```

```

3075 \Fi
3076
3077 \ifisint{maxdepth_neg}\then
3078   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
3079 \Else\ifisglyph{j}\then
3080   \setint{maxdepth}{\depth{j}}
3081 \Else
3082   \setint{maxdepth}{250}
3083 \Fi\Fi
3084
3085 \ifisglyph{six}\then
3086   \setint{digitwidth}{\width{six}}
3087 \Else
3088   \setint{digitwidth}{500}
3089 \Fi
3090
3091 \setint{capstem}{0} % not in AFM files
3092
3093 \setfontdimen{1}{italicslant}      % italic slant
3094 \setfontdimen{2}{interword}        % interword space
3095 \setfontdimen{3}{stretchword}     % interword stretch
3096 \setfontdimen{4}{shrinkword}      % interword shrink
3097 \setfontdimen{5}{xheight}         % x-height
3098 \setfontdimen{6}{quad}            % quad
3099 \setfontdimen{7}{extraspace}      % extra space after .
3100 \setfontdimen{8}{capheight}       % cap height
3101 \setfontdimen{9}{ascender}        % ascender
3102 \setfontdimen{10}{accicapheight}  % accented cap height
3103 \setfontdimen{11}{descender}      % descender's depth
3104 \setfontdimen{12}{maxheight}       % max height
3105 \setfontdimen{13}{maxdepth}        % max depth
3106 \setfontdimen{14}{digitwidth}      % digit width
3107 \setfontdimen{15}{verticalstem}    % dominant width of vertical stems
3108 \setfontdimen{16}{baselineskip}    % baselineskip
3109
3110 \ifnumber{\int{ligaturing}}<0\then
3111   \comment{In this case, the codingscheme can be different from the
3112   default, and therefore we refrain from setting it.}
3113 \Else
3114   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTINF}
3115 \Fi
3116
3117 \setslot{\lc{Grave}{grave}}
3118   \comment{The grave accent '\{}.\}
3119 \endsetslot
3120
3121 \setslot{\lc{Acute}{acute}}
3122   \comment{The acute accent '\{}.\}
3123 \endsetslot
3124
3125 \setslot{\lc{Circumflex}{circumflex}}
3126   \comment{The circumflex accent '\^{}.\}
3127 \endsetslot
3128

```

```

3129 \setslot{\lc{Tilde}{tilde}}
3130   \comment{The tilde accent '\~{}' .}
3131 \endsetslot
3132
3133 \setslot{\lc{Dieresis}{dieresis}}
3134   \comment{The umlaut or dieresis accent '\\"{}' .}
3135 \endsetslot
3136
3137 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
3138   \comment{The long Hungarian umlaut '\H{}' .}
3139 \endsetslot
3140
3141 \setslot{\lc{Ring}{ring}}
3142   \comment{The ring accent '\r{}' .}
3143 \endsetslot
3144
3145 \setslot{\lc{Caron}{caron}}
3146   \comment{The caron or h' a\v cek accent '\v{}' .}
3147 \endsetslot
3148
3149 \setslot{\lc{Breve}{breve}}
3150   \comment{The breve accent '\u{}' .}
3151 \endsetslot
3152
3153 \setslot{\lc{Macron}{macron}}
3154   \comment{The macron accent '\={}' .}
3155 \endsetslot
3156
3157 \setslot{\lc{Dotaccent}{dotaccent}}
3158   \comment{The dot accent '\.{}' .}
3159 \endsetslot
3160
3161 \setslot{\lc{Cedilla}{cedilla}}
3162   \comment{The cedilla accent '\c {}' .}
3163 \endsetslot
3164
3165 \setslot{\lc{Ogonek}{ogonek}}
3166   \comment{The ogonek accent '\k {}' .}
3167 \endsetslot
3168
3169 \setslot{quotesinglbase.inferior}
3170   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
3171           but with different sidebearings.}
3172 \endsetslot
3173
3174 \setslot{guilsinglleft.inferior}
3175   \comment{A French single opening quote mark '\guilsinglleft',
3176           unavailable in \plain\ \TeX.}
3177 \endsetslot
3178
3179 \setslot{guilsinglright.inferior}
3180   \comment{A French single closing quote mark '\guilsinglright',
3181           unavailable in \plain\ \TeX.}
3182 \endsetslot

```

```

3183 \setslot{quotedblleft.inferior}
3184   \comment{The English opening quote mark ‘\,\textquotedblleft\,’.}
3185 \endsetslot
3187
3188 \setslot{quotedblright.inferior}
3189   \comment{The English closing quote mark ‘\,\textquotedblright\,’.}
3190 \endsetslot
3191
3192 \setslot{quotedblbase.inferior}
3193   \comment{A German double quote mark ‘\quotedblbase’ similar to two commas,
3194       but with tighter letterspacing and different sidebearings.}
3195 \endsetslot
3196
3197 \setslot{guillemotleft.inferior}
3198   \comment{A French double opening quote mark ‘\guillemotleft’,
3199       unavailable in \plain\ \TeX.}
3200 \endsetslot
3201
3202 \setslot{guillemotright.inferior}
3203   \comment{A French closing opening quote mark ‘\guillemotright’,
3204       unavailable in \plain\ \TeX.}
3205 \endsetslot
3206
3207 \setslot{endash.inferior}
3208   \ligature{LIG}{hyphen.inferior}{emdash.inferior}
3209   \comment{The number range dash ‘1--9’.
3210       This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
3211       called ‘endash’ to work right.
3212       The ‘\textendash’.
3213       In a monowidth font, this might be set as ‘\texttt{1{-}9}’.}
3214 \endsetslot
3215
3216 \setslot{emdash.inferior}
3217   \comment{The punctuation dash ‘Oh---boy.’
3218       This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
3219       called ‘emdash’ to work right.
3220       The ‘\textemdash’.
3221       In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy.}’}
3222 \endsetslot
3223
3224 \setslot{compwordmark.inferior}
3225   \comment{An invisible glyph, with zero width and depth, but the
3226       height of lowercase letters without ascenders.
3227       It is used to stop ligaturing in words like ‘shelf{}ful’.}
3228 \endsetslot
3229
3230 \setslot{perthousandzero.inferior}
3231   \comment{A glyph which is placed after ‘\%’ to produce a
3232       ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
3233       Your guess is as good as mine as to what this glyph should look
3234       like in a monowidth font.}
3235 \endsetslot
3236

```

```

3237 \setslot{\lc{dotlessI}{dotlessi}}
3238   \comment{A dotless i '\i', used to produce accented letters such as
3239     '\=\i'.}
3240 \endsetslot
3241
3242 \setslot{\lc{dotlessJ}{dotlessj}}
3243   \comment{A dotless j '\j', used to produce accented letters such as
3244     '\=\j'. Most non-\TeX\ fonts do not have this glyph.}
3245 \endsetslot
3246
3247 \ifnumber{\int{ligaturing}}<0\then \skipslots{5}\Else
3248
3249 \setslot{\lclig{FF}{ff}}
3250   \ifnumber{\int{ligaturing}}>0\then
3251     \ligature{LIG}{\lc{I}{i}}{\lclig{FFI}{ffi}}
3252     \ligature{LIG}{\lc{L}{l}}{\lclig{FFL}{ffl}}
3253   \Fi
3254   \comment{The 'ff' ligature. It should be two characters wide in a
3255     monowidth font.}
3256 \endsetslot
3257
3258 \setslot{\lclig{FI}{fi}}
3259   \comment{The 'fi' ligature. It should be two characters wide in a
3260     monowidth font.}
3261 \endsetslot
3262
3263 \setslot{\lclig{FL}{fl}}
3264   \comment{The 'fl' ligature. It should be two characters wide in a
3265     monowidth font.}
3266 \endsetslot
3267
3268 \setslot{\lclig{FFI}{ffi}}
3269   \comment{The 'ffi' ligature. It should be three characters wide in a
3270     monowidth font.}
3271 \endsetslot
3272
3273 \setslot{\lclig{FFL}{ffl}}
3274   \comment{The 'ffl' ligature. It should be three characters wide in a
3275     monowidth font.}
3276 \endsetslot
3277
3278 \Fi
3279
3280 \setslot{visiblespace.inferior}
3281   \comment{A visible space glyph '\textvisiblespace'.}
3282 \endsetslot
3283
3284 \setslot{exclam.inferior}
3285   \ligature{LIG}{\quotelleft.inferior}{\exclandown.inferior}
3286   \comment{The exclamation mark '!'.}
3287 \endsetslot
3288
3289 \setslot{quotedbl.inferior}
3290   \comment{The 'neutral' double quotation mark '\,\textquotedbl\,',}

```

```
3291     included for use in monowidth fonts, or for setting computer
3292     programs. Note that the inclusion of this glyph in this slot
3293     means that \TeX\ documents which used '{\tt\char`\\"} as an
3294     input character will no longer work.}
3295 \endsetslot
3296
3297 \setslot{numbersign.inferior}
3298     \comment{The hash sign '\#'.}
3299 \endsetslot
3300
3301 \setslot{dollar.inferior}
3302     \comment{The dollar sign '\$'.}
3303 \endsetslot
3304
3305 \setslot{percent.inferior}
3306     \comment{The percent sign '\%'.}
3307 \endsetslot
3308
3309 \setslot{ampersand.inferior}
3310     \comment{The ampersand sign '\&'.}
3311 \endsetslot
3312
3313 \setslot{quoteright.inferior}
3314     \ligature{LIG}{quoteright.inferior}{quotedblright.inferior}
3315     \comment{The English closing single quote mark '\,\textquoteright\,'.}
3316 \endsetslot
3317
3318 \setslot{parenleft.inferior}
3319     \comment{The opening parenthesis '('.}
3320 \endsetslot
3321
3322 \setslot{parenright.inferior}
3323     \comment{The closing parenthesis ')'.}
3324 \endsetslot
3325
3326 \setslot{asterisk.inferior}
3327     \comment{The raised asterisk '*'.}
3328 \endsetslot
3329
3330 \setslot{plus.inferior}
3331     \comment{The addition sign '+'.}
3332 \endsetslot
3333
3334 \setslot{comma.inferior}
3335     \ligature{LIG}{comma.inferior}{quotedblbase.inferior}
3336     \comment{The comma ','.}
3337 \endsetslot
3338
3339 \setslot{hyphen.inferior}
3340     \ligature{LIG}{hyphen.inferior}{endash.inferior}
3341     \ligature{LIG}{hyphenchar.inferior}{hyphenchar.inferior}
3342     \comment{The hyphen '-'.}
3343 \endsetslot
3344
```

```
3345 \setslot{period.inferior}
3346     \comment{The period ‘.’.}
3347 \endsetslot
3348
3349 \setslot{slash.inferior}
3350     \comment{The forward oblique ‘/’.}
3351 \endsetslot
3352
3353 \setslot{\digit{zero}}
3354     \comment{The number ‘0’. This (and all the other numerals) may be
3355         old style or ranging digits.}
3356 \endsetslot
3357
3358 \setslot{\digit{one}}
3359     \comment{The number ‘1’.}
3360 \endsetslot
3361
3362 \setslot{\digit{two}}
3363     \comment{The number ‘2’.}
3364 \endsetslot
3365
3366 \setslot{\digit{three}}
3367     \comment{The number ‘3’.}
3368 \endsetslot
3369
3370 \setslot{\digit{four}}
3371     \comment{The number ‘4’.}
3372 \endsetslot
3373
3374 \setslot{\digit{five}}
3375     \comment{The number ‘5’.}
3376 \endsetslot
3377
3378 \setslot{\digit{six}}
3379     \comment{The number ‘6’.}
3380 \endsetslot
3381
3382 \setslot{\digit{seven}}
3383     \comment{The number ‘7’.}
3384 \endsetslot
3385
3386 \setslot{\digit{eight}}
3387     \comment{The number ‘8’.}
3388 \endsetslot
3389
3390 \setslot{\digit{nine}}
3391     \comment{The number ‘9’.}
3392 \endsetslot
3393
3394 \setslot{colon.inferior}
3395     \comment{The colon punctuation mark ‘:’.}
3396 \endsetslot
3397
3398 \setslot{semicolon.inferior}
```

```
3399     \comment{The semi-colon punctuation mark ';' .}
3400 \endsetslot
3401
3402 \setslot{less.inferior}
3403     \ligature[LIG]{less.inferior}{guillemotleft.inferior}
3404     \comment{The less-than sign '\textless'.}
3405 \endsetslot
3406
3407 \setslot{equal.inferior}
3408     \comment{The equals sign '=' .}
3409 \endsetslot
3410
3411 \setslot{greater.inferior}
3412     \ligature[LIG]{greater.inferior}{guillemotright.inferior}
3413     \comment{The greater-than sign '\textgreater'.}
3414 \endsetslot
3415
3416 \setslot{question.inferior}
3417     \ligature[LIG]{quoteleft.inferior}{questiondown.inferior}
3418     \comment{The question mark '?'.}
3419 \endsetslot
3420
3421 \setslot{at.inferior}
3422     \comment{The at sign '@'.}
3423 \endsetslot
3424
3425 \setslot{\uc{A}{a}}
3426     \comment{The letter '{A}'.}
3427 \endsetslot
3428
3429 \setslot{\uc{B}{b}}
3430     \comment{The letter '{B}'.}
3431 \endsetslot
3432
3433 \setslot{\uc{C}{c}}
3434     \comment{The letter '{C}'.}
3435 \endsetslot
3436
3437 \setslot{\uc{D}{d}}
3438     \comment{The letter '{D}'.}
3439 \endsetslot
3440
3441 \setslot{\uc{E}{e}}
3442     \comment{The letter '{E}'.}
3443 \endsetslot
3444
3445 \setslot{\uc{F}{f}}
3446     \comment{The letter '{F}'.}
3447 \endsetslot
3448
3449 \setslot{\uc{G}{g}}
3450     \comment{The letter '{G}'.}
3451 \endsetslot
3452
```

```

3453 \setsheet{\uc{H}{h}}
3454   \comment{The letter '{H}'.}
3455 \endsetsheet
3456
3457 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3458
3459 \setsheet{\uc{I}{i}}
3460   \comment{The letter '{I}'.}
3461 \endsetsheet
3462
3463 \Fi
3464
3465 \setsheet{\uc{J}{j}}
3466   \comment{The letter '{J}'.}
3467 \endsetsheet
3468
3469 \setsheet{\uc{K}{k}}
3470   \comment{The letter '{K}'.}
3471 \endsetsheet
3472
3473 \setsheet{\uc{L}{l}}
3474   \comment{The letter '{L}'.}
3475 \endsetsheet
3476
3477 \setsheet{\uc{M}{m}}
3478   \comment{The letter '{M}'.}
3479 \endsetsheet
3480
3481 \setsheet{\uc{N}{n}}
3482   \comment{The letter '{N}'.}
3483 \endsetsheet
3484
3485 \setsheet{\uc{O}{o}}
3486   \comment{The letter '{O}'.}
3487 \endsetsheet
3488
3489 \setsheet{\uc{P}{p}}
3490   \comment{The letter '{P}'.}
3491 \endsetsheet
3492
3493 \setsheet{\uc{Q}{q}}
3494   \comment{The letter '{Q}'.}
3495 \endsetsheet
3496
3497 \setsheet{\uc{R}{r}}
3498   \comment{The letter '{R}'.}
3499 \endsetsheet
3500
3501 \setsheet{\uc{S}{s}}
3502   \comment{The letter '{S}'.}
3503 \endsetsheet
3504
3505 \setsheet{\uc{T}{t}}
3506   \comment{The letter '{T}'.}

```

```

3507 \endsetslot
3508
3509 \setslot{\uc{U}{u}}
3510   \comment{The letter '{U}'.}
3511 \endsetslot
3512
3513 \setslot{\uc{V}{v}}
3514   \comment{The letter '{V}'.}
3515 \endsetslot
3516
3517 \setslot{\uc{W}{w}}
3518   \comment{The letter '{W}'.}
3519 \endsetslot
3520
3521 \setslot{\uc{X}{x}}
3522   \comment{The letter '{X}'.}
3523 \endsetslot
3524
3525 \setslot{\uc{Y}{y}}
3526   \comment{The letter '{Y}'.}
3527 \endsetslot
3528
3529 \setslot{\uc{Z}{z}}
3530   \comment{The letter '{Z}'.}
3531 \endsetslot
3532
3533 \setslot{bracketleft.inferior}
3534   \comment{The opening square bracket '['.}
3535 \endsetslot
3536
3537 \setslot{backslash.inferior}
3538   \comment{The backwards oblique '\textbackslash'.}
3539 \endsetslot
3540
3541 \setslot{bracketright.inferior}
3542   \comment{The closing square bracket ']'.}
3543 \endsetslot
3544
3545 \setslot{asciicircum.inferior}
3546   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
3547     This is included for compatibility with typewriter fonts used
3548     for computer listings.}
3549 \endsetslot
3550
3551 \setslot{underscore.inferior}
3552   \comment{The ASCII underline character '\textunderline', usually
3553     set on the baseline.
3554     This is included for compatibility with typewriter fonts used
3555     for computer listings.}
3556 \endsetslot
3557
3558 \setslot{quotyleft.inferior}
3559   \ligature{LIG}{quotyleft.inferior}{quotedblleft.inferior}
3560   \comment{The English opening single quote mark '\textquotyleft\,'.}

```

```

3561 \endsetslot
3562
3563 \setslot{\lc{A}{a}}
3564   \comment{The letter '{a}'.}
3565 \endsetslot
3566
3567 \setslot{\lc{B}{b}}
3568   \comment{The letter '{b}'.}
3569 \endsetslot
3570
3571 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3572
3573   \setslot{\lc{C}{c}}
3574     \comment{The letter '{c}'.}
3575 \endsetslot
3576
3577 \Fi
3578
3579 \setslot{\lc{D}{d}}
3580   \comment{The letter '{d}'.}
3581 \endsetslot
3582
3583 \setslot{\lc{E}{e}}
3584   \comment{The letter '{e}'.}
3585 \endsetslot
3586
3587 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3588
3589   \setslot{\lc{F}{f}}
3590   \ifnumber{\int{ligaturing}}>{0}\then
3591     \ligature{LIG}{\lc{I}{i}}{\lclig{FI}{fi}}
3592     \ligature{LIG}{\lc{F}{f}}{\lclig{FF}{ff}}
3593     \ligature{LIG}{\lc{L}{l}}{\lclig{FL}{fl}}
3594   \Fi
3595   \comment{The letter '{f}'.}
3596 \endsetslot
3597
3598 \Fi
3599
3600 \setslot{\lc{G}{g}}
3601   \comment{The letter '{g}'.}
3602 \endsetslot
3603
3604 \setslot{\lc{H}{h}}
3605   \comment{The letter '{h}'.}
3606 \endsetslot
3607
3608 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3609
3610   \setslot{\lc{I}{i}}
3611   \comment{The letter '{i}'.}
3612 \endsetslot
3613
3614 \Fi

```

```

3615 \setslot{\lc{J}{j}}
3616   \comment{The letter '{j}'.}
3617 \endsetslot
3618
3619 \setslot{\lc{K}{k}}
3620   \comment{The letter '{k}'.}
3621 \endsetslot
3622
3623 \setslot{\lc{L}{l}}
3624   \comment{The letter '{l}'.}
3625 \endsetslot
3626
3627 \setslot{\lc{M}{m}}
3628   \comment{The letter '{m}'.}
3629 \endsetslot
3630
3631 \setslot{\lc{N}{n}}
3632   \comment{The letter '{n}'.}
3633 \endsetslot
3634
3635 \setslot{\lc{O}{o}}
3636   \comment{The letter '{o}'.}
3637 \endsetslot
3638
3639 \setslot{\lc{P}{p}}
3640   \comment{The letter '{p}'.}
3641 \endsetslot
3642
3643 \setslot{\lc{Q}{q}}
3644   \comment{The letter '{q}'.}
3645 \endsetslot
3646
3647 \setslot{\lc{R}{r}}
3648   \comment{The letter '{r}'.}
3649 \endsetslot
3650
3651 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
3652
3653 \setslot{\lc{S}{s}}
3654   \comment{The letter '{s}'.}
3655 \endsetslot
3656
3657 \Fi
3658
3659 \setslot{\lc{T}{t}}
3660   \comment{The letter '{t}'.}
3661 \endsetslot
3662
3663 \setslot{\lc{U}{u}}
3664   \comment{The letter '{u}'.}
3665 \endsetslot
3666
3667 \setslot{\lc{V}{v}}
3668

```

```

3669     \comment{The letter '{v}'.}
3670     \endsetslot
3671
3672     \setslot{\lc{W}{w}}
3673         \comment{The letter '{w}'.}
3674     \endsetslot
3675
3676     \setslot{\lc{X}{x}}
3677         \comment{The letter '{x}'.}
3678     \endsetslot
3679
3680     \setslot{\lc{Y}{y}}
3681         \comment{The letter '{y}'.}
3682     \endsetslot
3683
3684     \setslot{\lc{Z}{z}}
3685         \comment{The letter '{z}'.}
3686     \endsetslot
3687
3688     \setslot{braceleft.inferior}
3689         \comment{The opening curly brace '\textbraceleft'.}
3690     \endsetslot
3691
3692     \setslot{bar.inferior}
3693         \comment{The ASCII vertical bar '\textbar'.
3694             This is included for compatibility with typewriter fonts used
3695             for computer listings.}
3696     \endsetslot
3697
3698     \setslot{braceright.inferior}
3699         \comment{The closing curly brace '\textbraceright'.}
3700     \endsetslot
3701
3702     \setslot{asciitilde.inferior}
3703         \comment{The ASCII tilde '\textasciitilde'.
3704             This is included for compatibility with typewriter fonts used
3705             for computer listings.}
3706     \endsetslot
3707
3708     \setslot{hyphenchar.inferior}
3709         \comment{The glyph used for hyphenation in this font, which will
3710             almost always be the same as 'hyphen'.}
3711     \endsetslot
3712
3713     \setslot{\uctop{Abreve}{abreve}}
3714         \comment{The letter '\u A'.}
3715     \endsetslot
3716
3717     \setslot{\uc{Aogonek}{aogonek}}
3718         \comment{The letter '\k A'.}
3719     \endsetslot
3720
3721     \setslot{\uctop{Cacute}{cacute}}
3722         \comment{The letter '\' C'.}

```

```

3723 \endsetslot
3724
3725 \setslot{\uctop{Ccaron}{ccaron}}
3726   \comment{The letter '\v C'.}
3727 \endsetslot
3728
3729 \setslot{\uctop{Dcaron}{dcaron}}
3730   \comment{The letter '\v D'.}
3731 \endsetslot
3732
3733 \setslot{\uctop{Ecaron}{ecaron}}
3734   \comment{The letter '\v E'.}
3735 \endsetslot
3736
3737 \setslot{\uc{Eogonek}{eogonek}}
3738   \comment{The letter '\k E'.}
3739 \endsetslot
3740
3741 \setslot{\uctop{Gbreve}{gbreve}}
3742   \comment{The letter '\u G'.}
3743 \endsetslot
3744
3745 \setslot{\uctop{Lacute}{lacute}}
3746   \comment{The letter '\` L'.}
3747 \endsetslot
3748
3749 \setslot{\uc{Lcaron}{lcaron}}
3750   \comment{The letter '\v L'.}
3751 \endsetslot
3752
3753 \setslot{\uc{Lslash}{lslash}}
3754   \comment{The letter '\L'.}
3755 \endsetslot
3756
3757 \setslot{\uctop{Nacute}{nacute}}
3758   \comment{The letter '\` N'.}
3759 \endsetslot
3760
3761 \setslot{\uctop{Ncaron}{ncaron}}
3762   \comment{The letter '\v N'.}
3763 \endsetslot
3764
3765 \setslot{\uc{Eng}{eng}}
3766   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
            to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
            seems.}
3767 \endsetslot
3768
3769 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
3770   \comment{The letter '\H O'.}
3771 \endsetslot
3772
3773 \setslot{\uctop{Racute}{racute}}
3774   \comment{The letter '\` R'.}

```

```

3775 \endsetslot
3776
3777 \setslot{\uctop{Rcaron}{rcaron}}
3778   \comment{The letter '\v R'.}
3779 \endsetslot
3780
3781 \setslot{\uctop{Sacute}{sacute}}
3782   \comment{The letter '\v S'.}
3783 \endsetslot
3784
3785 \setslot{\uctop{Scaron}{scaron}}
3786   \comment{The letter '\v S'.}
3787 \endsetslot
3788
3789 \setslot{\uc{Scedilla}{scedilla}}
3790   \comment{The letter '\c S'.}
3791 \endsetslot
3792
3793 \setslot{\uctop{Tcaron}{tcaron}}
3794   \comment{The letter '\v T'.}
3795 \endsetslot
3796
3797 \setslot{\uc{Tcedilla}{tcedilla}}
3798   \comment{The letter '\c T'.}
3799 \endsetslot
3800
3801 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
3802   \comment{The letter '\H U'.}
3803 \endsetslot
3804
3805 \setslot{\uctop{Uring}{uring}}
3806   \comment{The letter '\r U'.}
3807 \endsetslot
3808
3809 \setslot{\uctop{Ydieresis}{ydieresis}}
3810   \comment{The letter '\Y'.}
3811 \endsetslot
3812
3813 \setslot{\uctop{Zacute}{zacute}}
3814   \comment{The letter '\v Z'.}
3815 \endsetslot
3816
3817 \setslot{\uctop{Zcaron}{zcaron}}
3818   \comment{The letter '\v Z'.}
3819 \endsetslot
3820
3821 \setslot{\uctop{Zdotaccent}{zdotaccent}}
3822   \comment{The letter '\. Z'.}
3823 \endsetslot
3824
3825 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
3826
3827 \setslot{\uclig{IJ}{ij}}
3828   \comment{The letter 'IJ'. This is a single letter, and in a

```

```
3829         monowidth font should ideally be one letter wide.}
3830     \endsetslot
3831
3832 \Fi
3833
3834 \setslot{\uctop{Idotaccent}{idotaccent}}
3835     \comment{The letter '\. I'.}
3836 \endsetslot
3837
3838 \setslot{\lc{Dbar}{dbar}}
3839     \comment{The letter '\dj'.}
3840 \endsetslot
3841
3842 \setslot{section.inferior}
3843     \comment{The section mark '\textsection'.}
3844 \endsetslot
3845
3846 \setslot{\lctop{Abreve}{abreve}}
3847     \comment{The letter '\u a'.}
3848 \endsetslot
3849
3850 \setslot{\lc{Aogonek}{aogonek}}
3851     \comment{The letter '\k a'.}
3852 \endsetslot
3853
3854 \setslot{\lctop{Cacute}{cacute}}
3855     \comment{The letter '\c c'.}
3856 \endsetslot
3857
3858 \setslot{\lctop{Ccaron}{ccaron}}
3859     \comment{The letter '\v c'.}
3860 \endsetslot
3861
3862 \setslot{\lctop{Dcaron}{dcaron}}
3863     \comment{The letter '\v d'.}
3864 \endsetslot
3865
3866 \setslot{\lctop{Ecaron}{ecaron}}
3867     \comment{The letter '\v e'.}
3868 \endsetslot
3869
3870 \setslot{\lc{Eogonek}{eogonek}}
3871     \comment{The letter '\k e'.}
3872 \endsetslot
3873
3874 \setslot{\lctop{Gbreve}{gbreve}}
3875     \comment{The letter '\u g'.}
3876 \endsetslot
3877
3878 \setslot{\lctop{Lacute}{lacute}}
3879     \comment{The letter '\l'.}
3880 \endsetslot
3881
3882 \setslot{\lc{Lcaron}{lcaron}}
```

```

3883     \comment{The letter '\v l'.}
3884 \endsetslot
3885
3886 \setslot{\lc{Lslash}{lslash}}
3887     \comment{The letter '\l'.}
3888 \endsetslot
3889
3890 \setslot{\lctop{Nacute}{nacute}}
3891     \comment{The letter '\ n'.}
3892 \endsetslot
3893
3894 \setslot{\lctop{Ncaron}{ncaron}}
3895     \comment{The letter '\v n'.}
3896 \endsetslot
3897
3898 \setslot{\lc{Eng}{eng}}
3899     \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
          to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
          it seems.}
3900 \endsetslot
3901
3902 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
3903     \comment{The letter '\H o'.}
3904 \endsetslot
3905
3906 \setslot{\lctop{Racute}{racute}}
3907     \comment{The letter '\ r'.}
3908 \endsetslot
3909
3910 \setslot{\lctop{Rcaron}{rcaron}}
3911     \comment{The letter '\v r'.}
3912 \endsetslot
3913
3914 \setslot{\lctop{Sacute}{sacute}}
3915     \comment{The letter '\ s'.}
3916 \endsetslot
3917
3918 \setslot{\lctop{Scaron}{scaron}}
3919     \comment{The letter '\v s'.}
3920 \endsetslot
3921
3922 \setslot{\lc{Scedilla}{scedilla}}
3923     \comment{The letter '\c s'.}
3924 \endsetslot
3925
3926 \setslot{\lctop{Tcaron}{tcaron}}
3927     \comment{The letter '\v t'.}
3928 \endsetslot
3929
3930 \setslot{\lc{Tcedilla}{tcedilla}}
3931     \comment{The letter '\c t'.}
3932 \endsetslot
3933
3934 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}

```

```

3935     \comment{The letter '\H u'.}
3936 \endsetslot
3937
3938 \setslot{\lctop{Uring}{uring}}
3939     \comment{The letter '\r u'.}
3940 \endsetslot
3941
3942 \setslot{\lctop{Ydieresis}{ydieresis}}
3943     \comment{The letter '\^ y'.}
3944 \endsetslot
3945
3946 \setslot{\lctop{Zacute}{zacute}}
3947     \comment{The letter '\` z'.}
3948 \endsetslot
3949
3950 \setslot{\lctop{Zcaron}{zcaron}}
3951     \comment{The letter '\v z'.}
3952 \endsetslot
3953
3954 \setslot{\lctop{Zdotaccent}{zdotaccent}}
3955     \comment{The letter '\. z'.}
3956 \endsetslot
3957
3958 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
3959
3960     \setslot{\lclig{IJ}{ij}}
3961         \comment{The letter 'ij'. This is a single letter, and in a
3962             monowidth font should ideally be one letter wide.}
3963 \endsetslot
3964
3965 \Fi
3966
3967 \setslot{exclamdown.inferior}
3968     \comment{The Spanish punctuation mark '!'.}
3969 \endsetslot
3970
3971 \setslot{questiondown.inferior}
3972     \comment{The Spanish punctuation mark '?'.}
3973 \endsetslot
3974
3975 \setslot{sterling.inferior}
3976     \comment{The British currency mark '\textsterling'.}
3977 \endsetslot
3978
3979 \setslot{\uctop{Agrave}{agrave}}
3980     \comment{The letter '\` A'.}
3981 \endsetslot
3982
3983 \setslot{\uctop{Aacute}{aacute}}
3984     \comment{The letter '\^ A'.}
3985 \endsetslot
3986
3987 \setslot{\uctop{Acircumflex}{acircumflex}}
3988     \comment{The letter '\^ A'.}

```

```
3989 \endsetslot
3990
3991 \setslot{\uctop{Atilde}{atilde}}
3992     \comment{The letter '\~ A'.}
3993 \endsetslot
3994
3995 \setslot{\uctop{Adieresis}{adieresis}}
3996     \comment{The letter '\" A'.}
3997 \endsetslot
3998
3999 \setslot{\uctop{Aring}{aring}}
4000     \comment{The letter '\r A'.}
4001 \endsetslot
4002
4003 \setslot{\uc{AE}{ae}}
4004     \comment{The letter '\AE'. This is a single letter, and should not be
4005         faked with 'AE'.}
4006 \endsetslot
4007
4008 \setslot{\uc{Ccedilla}{ccedilla}}
4009     \comment{The letter '\c C'.}
4010 \endsetslot
4011
4012 \setslot{\uctop{Egrave}{egrave}}
4013     \comment{The letter '\` E'.}
4014 \endsetslot
4015
4016 \setslot{\uctop{Eacute}{eacute}}
4017     \comment{The letter '\^ E'.}
4018 \endsetslot
4019
4020 \setslot{\uctop{Ecircumflex}{ecircumflex}}
4021     \comment{The letter '\^ E'.}
4022 \endsetslot
4023
4024 \setslot{\uctop{Edieresis}{edieresis}}
4025     \comment{The letter '\\" E'.}
4026 \endsetslot
4027
4028 \setslot{\uctop{Igrave}{igrave}}
4029     \comment{The letter '\` I'.}
4030 \endsetslot
4031
4032 \setslot{\uctop{Iacute}{iacute}}
4033     \comment{The letter '\^ I'.}
4034 \endsetslot
4035
4036 \setslot{\uctop{Icircumflex}{icircumflex}}
4037     \comment{The letter '\^ I'.}
4038 \endsetslot
4039
4040 \setslot{\uctop{Idieresis}{idieresis}}
4041     \comment{The letter '\\" I'.}
4042 \endsetslot
```

```
4043 \setslot{\uc{Eth}{eth}}
4044   \comment{The uppercase Icelandic letter ‘Eth’ similar to a ‘D’
4045     with a horizontal bar through the stem. It is unavailable
4046     in \plain\ \TeX.}
4047 \endsetslot
4048
4049 \setslot{\uctop{Ntilde}{ntilde}}
4050   \comment{The letter ‘\~ N’.}
4051 \endsetslot
4052
4053 \setslot{\uctop{Ograve}{ograve}}
4054   \comment{The letter ‘\` O’.}
4055 \endsetslot
4056
4057 \setslot{\uctop{Oacute}{oacute}}
4058   \comment{The letter ‘\^ O’.}
4059 \endsetslot
4060
4061 \setslot{\uctop{Ocircumflex}{ocircumflex}}
4062   \comment{The letter ‘\~\^ O’.}
4063 \endsetslot
4064
4065 \setslot{\uctop{Otilde}{otilde}}
4066   \comment{The letter ‘\~ O’.}
4067 \endsetslot
4068
4069 \setslot{\uctop{Odieresis}{odieresis}}
4070   \comment{The letter ‘\" O’.}
4071 \endsetslot
4072
4073 \setslot{\uc{OE}{oe}}
4074   \comment{The letter ‘OE’. This is a single letter, and should not be
4075     faked with ‘OE’.}
4076 \endsetslot
4077
4078 \setslot{\uc{Oslash}{oslash}}
4079   \comment{The letter ‘\O’.}
4080 \endsetslot
4081
4082 \setslot{\uctop{Ugrave}{ugrave}}
4083   \comment{The letter ‘\` U’.}
4084 \endsetslot
4085
4086 \setslot{\uctop{Uacute}{uacute}}
4087   \comment{The letter ‘\^ U’.}
4088 \endsetslot
4089
4090 \setslot{\uctop{Ucircumflex}{ucircumflex}}
4091   \comment{The letter ‘\~\^ U’.}
4092 \endsetslot
4093
4094 \setslot{\uctop{Udieresis}{udieresis}}
4095   \comment{The letter ‘\" U’.}
4096 \endsetslot
```

```

4097 \endsetslot
4098
4099 \setslot{\uctop{Yacute}{yacute}}
4100   \comment{The letter '\ Y'.}
4101 \endsetslot
4102
4103 \setslot{\uc{Thorn}{thorn}}
4104   \comment{The Icelandic capital letter Thorn, similar to a 'P'
4105     with the bowl moved down. It is unavailable in \plain\ \TeX.}
4106 \endsetslot
4107
4108 \setslot{\uclig{SS}{germandbls}}
4109   \comment{The ligature 'SS', used to give an upper case '\ss'.
4110     In a monowidth font it should be two letters wide.}
4111 \endsetslot
4112
4113 \setslot{\lctop{Agrave}{agrave}}
4114   \comment{The letter '\` a'.}
4115 \endsetslot
4116
4117 \setslot{\lctop{Aacute}{aacute}}
4118   \comment{The letter '\^ a'.}
4119 \endsetslot
4120
4121 \setslot{\lctop{Acircumflex}{acircumflex}}
4122   \comment{The letter '\~ a'.}
4123 \endsetslot
4124
4125 \setslot{\lctop{Atilde}{atilde}}
4126   \comment{The letter '\~ a'.}
4127 \endsetslot
4128
4129 \setslot{\lctop{Adieresis}{adieresis}}
4130   \comment{The letter '\u00e0'.}
4131 \endsetslot
4132
4133 \setslot{\lctop{Aring}{aring}}
4134   \comment{The letter '\r a'.}
4135 \endsetslot
4136
4137 \setslot{\lc{AE}{ae}}
4138   \comment{The letter '\ae'. This is a single letter, and should not be
4139     faked with 'ae'.}
4140 \endsetslot
4141
4142 \setslot{\lc{Ccedilla}{ccedilla}}
4143   \comment{The letter '\c c'.}
4144 \endsetslot
4145
4146 \setslot{\lctop{Egrave}{egrave}}
4147   \comment{The letter '\` e'.}
4148 \endsetslot
4149
4150 \setslot{\lctop{Eacute}{eacute}}

```

```
4151     \comment{The letter '\` e'.}
4152 \endsetslot
4153
4154 \setslot{\lctop{Ecircumflex}{ecircumflex}}
4155     \comment{The letter '\^ e'.}
4156 \endsetslot
4157
4158 \setslot{\lctop{Edieresis}{edieresis}}
4159     \comment{The letter '\\" e'.}
4160 \endsetslot
4161
4162 \setslot{\lctop{Igrave}{igrave}}
4163     \comment{The letter '\`i'.}
4164 \endsetslot
4165
4166 \setslot{\lctop{Iacute}{iacute}}
4167     \comment{The letter '\`i'.}
4168 \endsetslot
4169
4170 \setslot{\lctop{Icircumflex}{icircumflex}}
4171     \comment{The letter '\^i'.}
4172 \endsetslot
4173
4174 \setslot{\lctop{Idieresis}{idieresis}}
4175     \comment{The letter '\\"i'.}
4176 \endsetslot
4177
4178 \setslot{\lc{Eth}{eth}}
4179     \comment{The Icelandic lowercase letter 'eth' similar to
4180         a '$\partial$' with an oblique bar through the stem.
4181         It is unavailable in \plain\ TeX.}
4182 \endsetslot
4183
4184 \setslot{\lctop{Ntilde}{ntilde}}
4185     \comment{The letter '\~ n'.}
4186 \endsetslot
4187
4188 \setslot{\lctop{Ograve}{ograve}}
4189     \comment{The letter '\` o'.}
4190 \endsetslot
4191
4192 \setslot{\lctop{Oacute}{oacute}}
4193     \comment{The letter '\` o'.}
4194 \endsetslot
4195
4196 \setslot{\lctop{Ocircumflex}{ocircumflex}}
4197     \comment{The letter '\^ o'.}
4198 \endsetslot
4199
4200 \setslot{\lctop{Otilde}{otilde}}
4201     \comment{The letter '\~ o'.}
4202 \endsetslot
4203
4204 \setslot{\lctop{Odieresis}{odieresis}}
```

```

4205   \comment{The letter '\o'.}
4206   \endsetslot
4207
4208   \setslot{\lc{OE}{oe}}
4209     \comment{The letter '\oe'. This is a single letter, and should not be
4210       faked with 'oe'.}
4211   \endsetslot
4212
4213   \setslot{\lc{0slash}{oslash}}
4214     \comment{The letter '\o'.}
4215   \endsetslot
4216
4217   \setslot{\lctop{Ugrave}{ugrave}}
4218     \comment{The letter '\u' u'.}
4219   \endsetslot
4220
4221   \setslot{\lctop{Uacute}{uacute}}
4222     \comment{The letter '\u' u'.}
4223   \endsetslot
4224
4225   \setslot{\lctop{Ucircumflex}{ucircumflex}}
4226     \comment{The letter '\^ u'.}
4227   \endsetslot
4228
4229   \setslot{\lctop{Udieresis}{udieresis}}
4230     \comment{The letter '\u' u'.}
4231   \endsetslot
4232
4233   \setslot{\lctop{Yacute}{yacute}}
4234     \comment{The letter '\u' y'.}
4235   \endsetslot
4236
4237   \setslot{\lc{Thorn}{thorn}}
4238     \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
4239       with an ascender rising from the stem. It is unavailable
4240       in \plain\ \TeX.}
4241   \endsetslot
4242
4243   \setslot{\lc{SS}{germandbls}}
4244     \comment{The letter '\ss'.}
4245   \endsetslot
4246
4247 \endencoding

```

#### 4.3.9 t1-dotinferior.etx

t1-dotinferior.etx (*etx*)

```

4248 %%
4249 %% - The original notices at the top of that file concerning authors,
4250 %% maintenance etc. are replaced by this notice.
4251 %% - The file is renamed.
4252 %% - The encoding name is modified.

```

```

4253 %% - The file is modified to accommodate differences in glyph names.
4254 %% - The file is modified for use in encoding inferiors.
4255 %%
4256 %%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%
4257 \relax
4258 \encoding
4259
4260 \needsfontinstversion{1.910}
4261
4262 \setcommand\lc#1#2{\#2.inferior}
4263 \setcommand\uc#1#2{\#1.inferior}
4264 \setcommand\lctop#1#2{\#2.inferior}
4265 \setcommand\uctop#1#2{\#1.inferior}
4266 \setcommand\lclig#1#2{\#2.inferior}
4267 \ifisint{letterspacing}\then
4268   \ifnumber{\int{letterspacing}}={0}\then \Else
4269     \setcommand\uclig#1#2{\#1spaced}
4270     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
4271       you can't see it as \verb|\verb|\setcommand| commands are invisible in
4272       the typeset output.}
4273   \Fi
4274 \Fi
4275 \setcommand\uclig#1#2{\#1.inferior}
4276 \setcommand\digit#1{\#1.inferior}
4277
4278 \ifisint{monowidth}\then
4279   \setint{ligaturing}{0}
4280 \Else
4281   % The following empty line is *important* to get the formatting
4282   % right here (sigh)! (Remember that it is a \par token.)
4283
4284 \ifisint{letterspacing}\then
4285   \ifnumber{\int{letterspacing}}={0}\then \Else
4286     \setint{ligaturing}{0}
4287   \Fi
4288 \Fi
4289 \setint{ligaturing}{1}
4290 \Fi
4291
4292 \setint{italicslant}{0}
4293 \setint{quad}{1000}
4294 \setint{baselineskip}{1200}
4295
4296 \ifisglyph{x}\then
4297   \setint{xheight}{\height{x}}
4298 \Else
4299   \setint{xheight}{500}
4300 \Fi
4301
4302 \ifisglyph{space}\then
4303   \setint{interword}{\width{space}}
4304 \Else\ifisglyph{i}\then
4305   \setint{interword}{\width{i}}
4306 \Else

```

```

4307     \setint{interword}{333}
4308 \Fi\Fi
4309
4310 \ifisint{monowidth}\then
4311     \setint{stretchword}{0}
4312     \setint{shrinkword}{0}
4313     \setint{extraspace}{\int{interword}}
4314 \Else
4315     \setint{stretchword}{\scale{\int{interword}}{600}}
4316     \setint{shrinkword}{\scale{\int{interword}}{240}}
4317     \setint{extraspace}{\scale{\int{interword}}{240}}
4318 \Fi
4319
4320 \ifisglyph{X}\then
4321     \setint{capheight}{\height{X}}
4322 \Else
4323     \setint{capheight}{750}
4324 \Fi
4325
4326 \ifisglyph{d}\then
4327     \setint{ascender}{\height{d}}
4328 \Else\ifisint{capheight}\then
4329     \setint{ascender}{\int{capheight}}
4330 \Else
4331     \setint{ascender}{750}
4332 \Fi\Fi
4333
4334 \ifisglyph{Aring}\then
4335     \setint{acccapheight}{\height{Aring}}
4336 \Else
4337     \setint{acccapheight}{999}
4338 \Fi
4339
4340 \ifisint{descender_neg}\then
4341     \setint{descender}{\neg{\int{descender_neg}}}
4342 \Else\ifisglyph{p}\then
4343     \setint{descender}{\depth{p}}
4344 \Else
4345     \setint{descender}{250}
4346 \Fi\Fi
4347
4348 \ifisglyph{Aring}\then
4349     \setint{maxheight}{\height{Aring}}
4350 \Else
4351     \setint{maxheight}{1000}
4352 \Fi
4353
4354 \ifisint{maxdepth_neg}\then
4355     \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
4356 \Else\ifisglyph{j}\then
4357     \setint{maxdepth}{\depth{j}}
4358 \Else
4359     \setint{maxdepth}{250}
4360 \Fi\Fi

```

```

4361 \ifisglyph{six}\then
4362   \setint{digitwidth}{\width{six}}
4363 \Else
4364   \setint{digitwidth}{500}
4365 \Fi
4366
4367 \setint{capstem}{0} % not in AFM files
4368
4369 \setfontdimen{1}{italicslant}      % italic slant
4370 \setfontdimen{2}{interword}        % interword space
4371 \setfontdimen{3}{stretchword}     % interword stretch
4372 \setfontdimen{4}{shrinkword}      % interword shrink
4373 \setfontdimen{5}{xheight}         % x-height
4374 \setfontdimen{6}{quad}            % quad
4375 \setfontdimen{7}{extraspace}      % extra space after .
4376 \setfontdimen{8}{capheight}       % cap height
4377 \setfontdimen{9}{ascender}        % ascender
4378 \setfontdimen{10}{accapheight}    % accented cap height
4379 \setfontdimen{11}{descender}      % descender's depth
4380 \setfontdimen{12}{maxheight}      % max height
4381 \setfontdimen{13}{maxdepth}       % max depth
4382 \setfontdimen{14}{digitwidth}      % digit width
4383 \setfontdimen{15}{verticalstem}    % dominant width of vertical stems
4384 \setfontdimen{16}{baselineskip}    % baselineskip
4385
4386 \ifnumber{\int{ligaturing}}<{0}\then
4387   \comment{In this case, the codingscheme can be different from the
4388   default, and therefore we refrain from setting it.}
4389 \Else
4390   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTINFERIOR}
4391 \Fi
4392
4393 \setslot{\lc{Grave}{grave}}
4394   \comment{The grave accent '\{} .}
4395 \endsetslot
4396
4397 \setslot{\lc{Acute}{acute}}
4398   \comment{The acute accent '\{} .}
4399 \endsetslot
4400
4401 \setslot{\lc{Circumflex}{circumflex}}
4402   \comment{The circumflex accent '\^{} .}
4403 \endsetslot
4404
4405 \setslot{\lc{Tilde}{tilde}}
4406   \comment{The tilde accent '\~{} .}
4407 \endsetslot
4408
4409 \setslot{\lc{Dieresis}{dieresis}}
4410   \comment{The umlaut or dieresis accent '\\"{} .}
4411 \endsetslot
4412
4413 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
4414

```

```

4415   \comment{The long Hungarian umlaut ‘\H{}’.}
4416   \endsetslot
4417
4418 \setslot{\lc{Ring}{ring}}
4419   \comment{The ring accent ‘\r{}’.}
4420 \endsetslot
4421
4422 \setslot{\lc{Caron}{caron}}
4423   \comment{The caron or h\`a\v cek accent ‘\v{}’.}
4424 \endsetslot
4425
4426 \setslot{\lc{Breve}{breve}}
4427   \comment{The breve accent ‘\u{}’.}
4428 \endsetslot
4429
4430 \setslot{\lc{Macron}{macron}}
4431   \comment{The macron accent ‘\={{}’.}
4432 \endsetslot
4433
4434 \setslot{\lc{Dotaccent}{dotaccent}}
4435   \comment{The dot accent ‘\.{{}’.}
4436 \endsetslot
4437
4438 \setslot{\lc{Cedilla}{cedilla}}
4439   \comment{The cedilla accent ‘\c {}’.}
4440 \endsetslot
4441
4442 \setslot{\lc{Ogonek}{ogonek}}
4443   \comment{The ogonek accent ‘\k {}’.}
4444 \endsetslot
4445
4446 \setslot{quotesinglbase.inferior}
4447   \comment{A German single quote mark ‘\quotesinglbase’ similar to a comma,
4448       but with different sidebearings.}
4449 \endsetslot
4450
4451 \setslot{guilsinglleft.inferior}
4452   \comment{A French single opening quote mark ‘\guilsinglleft’,
4453       unavailable in \plain\ \TeX.}
4454 \endsetslot
4455
4456 \setslot{guilsinglright.inferior}
4457   \comment{A French single closing quote mark ‘\guilsinglright’,
4458       unavailable in \plain\ \TeX.}
4459 \endsetslot
4460
4461 \setslot{quotedblleft.inferior}
4462   \comment{The English opening quote mark ‘\,\textquotedblleft\,’.}
4463 \endsetslot
4464
4465 \setslot{quotedblright.inferior}
4466   \comment{The English closing quote mark ‘\,\textquotedblright\,’.}
4467 \endsetslot
4468

```

```

4469 \setslot{quotedblbase.inferior}
4470   \comment{A German double quote mark ‘\quotedblbase’ similar to two commas,
4471     but with tighter letterspacing and different sidebearings.}
4472 \endsetslot
4473
4474 \setslot{guillemotleft.inferior}
4475   \comment{A French double opening quote mark ‘\guillemotleft’,
4476     unavailable in \plain\ \TeX.}
4477 \endsetslot
4478
4479 \setslot{guillemotright.inferior}
4480   \comment{A French closing opening quote mark ‘\guillemotright’,
4481     unavailable in \plain\ \TeX.}
4482 \endsetslot
4483
4484 \setslot{endash.inferior}
4485   \ligature[LIG]{hyphen.inferior}{emdash.inferior}
4486   \comment{The number range dash ‘1--9’.
4487     This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
4488     called ‘endash’ to work right.
4489     The ‘\textendash’.
4490     In a monowidth font, this might be set as ‘\texttt{1{-}9}’.}
4491 \endsetslot
4492
4493 \setslot{emdash.inferior}
4494   \comment{The punctuation dash ‘Oh---boy.’
4495     This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
4496     called ‘emdash’ to work right.
4497     The ‘\textemdash’.
4498     In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy.}’}
4499 \endsetslot
4500
4501 \setslot{compwordmark.inferior}
4502   \comment{An invisible glyph, with zero width and depth, but the
4503     height of lowercase letters without ascenders.
4504     It is used to stop ligaturing in words like ‘shelf{}ful’.}
4505 \endsetslot
4506
4507 \setslot{perthousandzero.inferior}
4508   \comment{A glyph which is placed after ‘\%’ to produce a
4509     ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
4510     Your guess is as good as mine as to what this glyph should look
4511     like in a monowidth font.}
4512 \endsetslot
4513
4514 \setslot{\lc{dotlessI}{dotlessi}}
4515   \comment{A dotless i ‘\i’, used to produce accented letters such as
4516     ‘\=\i’.}
4517 \endsetslot
4518
4519 \setslot{\lc{dotlessJ}{dotlessj}}
4520   \comment{A dotless j ‘\j’, used to produce accented letters such as
4521     ‘\=\j’. Most non-\TeX\ fonts do not have this glyph.}
4522 \endsetslot

```

```

4523
4524 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{5}\Else
4525
4526 \setslot{\lc{FF}{ff}}
4527   \ifnumber{\int{ligaturing}}>{0}\then
4528     \ligature{LIG}{\lc{I}{i}}{\lc{FFI}{ffi}}
4529     \ligature{LIG}{\lc{L}{l}}{\lc{FFL}{ffl}}
4530   \Fi
4531   \comment{The 'ff' ligature. It should be two characters wide in a
4532     monowidth font.}
4533 \endsetslot
4534
4535 \setslot{\lc{FI}{fi}}
4536   \comment{The 'fi' ligature. It should be two characters wide in a
4537     monowidth font.}
4538 \endsetslot
4539
4540 \setslot{\lc{FL}{fl}}
4541   \comment{The 'fl' ligature. It should be two characters wide in a
4542     monowidth font.}
4543 \endsetslot
4544
4545 \setslot{\lc{FFI}{ffi}}
4546   \comment{The 'ffi' ligature. It should be three characters wide in a
4547     monowidth font.}
4548 \endsetslot
4549
4550 \setslot{\lc{FFL}{ffl}}
4551   \comment{The 'ffl' ligature. It should be three characters wide in a
4552     monowidth font.}
4553 \endsetslot
4554
4555 \Fi
4556
4557 \setslot{visiblespace.inferior}
4558   \comment{A visible space glyph '\textvisiblespace'.}
4559 \endsetslot
4560
4561 \setslot{exclam.inferior}
4562   \ligature{LIG}{quotelleft.inferior}{exclamdown.inferior}
4563   \comment{The exclamation mark '!'.}
4564 \endsetslot
4565
4566 \setslot{quotedbl.inferior}
4567   \comment{The 'neutral' double quotation mark '\textquotedbl',,
4568     included for use in monowidth fonts, or for setting computer
4569     programs. Note that the inclusion of this glyph in this slot
4570     means that \TeX documents which used '{\tt\char"} as an
4571     input character will no longer work.}
4572 \endsetslot
4573
4574 \setslot{numbersign.inferior}
4575   \comment{The hash sign '#'.}
4576 \endsetslot

```

```
4577 \setslot{dollar.inferior}
4578   \comment{The dollar sign '\$'.}
4579 \endsetslot
4580
4581 \setslot{percent.inferior}
4582   \comment{The percent sign '%'.}
4583 \endsetslot
4584
4585 \setslot{ampersand.inferior}
4586   \comment{The ampersand sign '&'.}
4587 \endsetslot
4588
4589 \setslot{quoteright.inferior}
4590   \ligature[LIG]{quoteright.inferior}{quotedblright.inferior}
4591   \comment{The English closing single quote mark '\,\textquoteright\,'.}
4592 \endsetslot
4593
4594 \setslot{parenleft.inferior}
4595   \comment{The opening parenthesis '('.}
4596 \endsetslot
4597
4598 \setslot{parenright.inferior}
4599   \comment{The closing parenthesis ')'.}
4600 \endsetslot
4601
4602 \setslot{asterisk.inferior}
4603   \comment{The raised asterisk '*'.}
4604 \endsetslot
4605
4606 \setslot{plus.inferior}
4607   \comment{The addition sign '+'.}
4608 \endsetslot
4609
4610 \setslot{comma.inferior}
4611   \ligature[LIG]{comma.inferior}{quotedblbase.inferior}
4612   \comment{The comma ','.}
4613 \endsetslot
4614
4615 \setslot{hyphen.inferior}
4616   \ligature[LIG]{hyphen.inferior}{endash.inferior}
4617   \ligature[LIG]{hyphenchar.inferior}{hyphenchar.inferior}
4618   \comment{The hyphen '-'.}
4619 \endsetslot
4620
4621 \setslot{period.inferior}
4622   \comment{The period '.'.}
4623 \endsetslot
4624
4625 \setslot{slash.inferior}
4626   \comment{The forward oblique '/'.}
4627 \endsetslot
4628
4629 \setslot{\digit{zero}}
```

```
4631     \comment{The number '0'. This (and all the other numerals) may be
4632         old style or ranging digits.}
4633 \endsetslot
4634
4635 \setslot{\digit{one}}
4636     \comment{The number '1'.}
4637 \endsetslot
4638
4639 \setslot{\digit{two}}
4640     \comment{The number '2'.}
4641 \endsetslot
4642
4643 \setslot{\digit{three}}
4644     \comment{The number '3'.}
4645 \endsetslot
4646
4647 \setslot{\digit{four}}
4648     \comment{The number '4'.}
4649 \endsetslot
4650
4651 \setslot{\digit{five}}
4652     \comment{The number '5'.}
4653 \endsetslot
4654
4655 \setslot{\digit{six}}
4656     \comment{The number '6'.}
4657 \endsetslot
4658
4659 \setslot{\digit{seven}}
4660     \comment{The number '7'.}
4661 \endsetslot
4662
4663 \setslot{\digit{eight}}
4664     \comment{The number '8'.}
4665 \endsetslot
4666
4667 \setslot{\digit{nine}}
4668     \comment{The number '9'.}
4669 \endsetslot
4670
4671 \setslot{colon.inferior}
4672     \comment{The colon punctuation mark ':' .}
4673 \endsetslot
4674
4675 \setslot{semicolon.inferior}
4676     \comment{The semi-colon punctuation mark ';' .}
4677 \endsetslot
4678
4679 \setslot{less.inferior}
4680     \ligature{LIG}{less.inferior}{guillemotleft.inferior}
4681     \comment{The less-than sign '\textless' .}
4682 \endsetslot
4683
4684 \setslot{equal.inferior}
```

```

4685     \comment{The equals sign '='.}
4686 \endsetslot
4687
4688 \setslot{greater.inferior}
4689     \ligature{LIG}{greater.inferior}{guillemotright.inferior}
4690     \comment{The greater-than sign '\textgreater'.}
4691 \endsetslot
4692
4693 \setslot{question.inferior}
4694     \ligature{LIG}{quotelleft.inferior}{questiondown.inferior}
4695     \comment{The question mark '?'.}
4696 \endsetslot
4697
4698 \setslot{at.inferior}
4699     \comment{The at sign '@'.}
4700 \endsetslot
4701
4702 \setslot{\uc{A}{a}}
4703     \comment{The letter '{A}'.}
4704 \endsetslot
4705
4706 \setslot{\uc{B}{b}}
4707     \comment{The letter '{B}'.}
4708 \endsetslot
4709
4710 \setslot{\uc{C}{c}}
4711     \comment{The letter '{C}'.}
4712 \endsetslot
4713
4714 \setslot{\uc{D}{d}}
4715     \comment{The letter '{D}'.}
4716 \endsetslot
4717
4718 \setslot{\uc{E}{e}}
4719     \comment{The letter '{E}'.}
4720 \endsetslot
4721
4722 \setslot{\uc{F}{f}}
4723     \comment{The letter '{F}'.}
4724 \endsetslot
4725
4726 \setslot{\uc{G}{g}}
4727     \comment{The letter '{G}'.}
4728 \endsetslot
4729
4730 \setslot{\uc{H}{h}}
4731     \comment{The letter '{H}'.}
4732 \endsetslot
4733
4734 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
4735
4736 \setslot{\uc{I}{i}}
4737     \comment{The letter '{I}'.}
4738 \endsetslot

```

```
4739 \Fi
4740
4741 \setslot{\uc{J}{j}}
4742     \comment{The letter '{J}'.}
4743 \endsetslot
4744
4745 \setslot{\uc{K}{k}}
4746     \comment{The letter '{K}'.}
4747 \endsetslot
4748
4749 \setslot{\uc{L}{l}}
4750     \comment{The letter '{L}'.}
4751 \endsetslot
4752
4753 \setslot{\uc{M}{m}}
4754     \comment{The letter '{M}'.}
4755 \endsetslot
4756
4757 \setslot{\uc{N}{n}}
4758     \comment{The letter '{N}'.}
4759 \endsetslot
4760
4761 \setslot{\uc{O}{o}}
4762     \comment{The letter '{O}'.}
4763 \endsetslot
4764
4765 \setslot{\uc{P}{p}}
4766     \comment{The letter '{P}'.}
4767 \endsetslot
4768
4769 \setslot{\uc{Q}{q}}
4770     \comment{The letter '{Q}'.}
4771 \endsetslot
4772
4773 \setslot{\uc{R}{r}}
4774     \comment{The letter '{R}'.}
4775 \endsetslot
4776
4777 \setslot{\uc{S}{s}}
4778     \comment{The letter '{S}'.}
4779 \endsetslot
4780
4781 \setslot{\uc{T}{t}}
4782     \comment{The letter '{T}'.}
4783 \endsetslot
4784
4785 \setslot{\uc{U}{u}}
4786     \comment{The letter '{U}'.}
4787 \endsetslot
4788
4789 \setslot{\uc{V}{v}}
4790     \comment{The letter '{V}'.}
4791 \endsetslot
4792
```

```
4793 \setslot{\uc{W}{w}}
4794   \comment{The letter '{W}'.}
4795 \endsetslot
4797
4798 \setslot{\uc{X}{x}}
4799   \comment{The letter '{X}'.}
4800 \endsetslot
4801
4802 \setslot{\uc{Y}{y}}
4803   \comment{The letter '{Y}'.}
4804 \endsetslot
4805
4806 \setslot{\uc{Z}{z}}
4807   \comment{The letter '{Z}'.}
4808 \endsetslot
4809
4810 \setslot{bracketleft.inferior}
4811   \comment{The opening square bracket '['.}
4812 \endsetslot
4813
4814 \setslot{backslash.inferior}
4815   \comment{The backwards oblique '\textbackslash'.}
4816 \endsetslot
4817
4818 \setslot{bracketright.inferior}
4819   \comment{The closing square bracket ']'.}
4820 \endsetslot
4821
4822 \setslot{asciicircum.inferior}
4823   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
4824     This is included for compatibility with typewriter fonts used
4825     for computer listings.}
4826 \endsetslot
4827
4828 \setslot{underscore.inferior}
4829   \comment{The ASCII underline character '\textunderline', usually
4830     set on the baseline.
4831     This is included for compatibility with typewriter fonts used
4832     for computer listings.}
4833 \endsetslot
4834
4835 \setslot{quotyleft.inferior}
4836   \ligature{LIG}{quotyleft.inferior}{quotedblleft.inferior}
4837   \comment{The English opening single quote mark '\textquotyleft\,'.}
4838 \endsetslot
4839
4840 \setslot{\lc{A}{a}}
4841   \comment{The letter '{a}'.}
4842 \endsetslot
4843
4844 \setslot{\lc{B}{b}}
4845   \comment{The letter '{b}'.}
4846 \endsetslot
```

```

4847 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
4848   \setslot{\lc{C}{c}}
4849     \comment{The letter '{c}'.}
4850   \endsetslot
4851
4852 \Fi
4853
4854 \setslot{\lc{D}{d}}
4855   \comment{The letter '{d}'.}
4856 \endsetslot
4857
4858 \setslot{\lc{E}{e}}
4859   \comment{The letter '{e}'.}
4860 \endsetslot
4861
4862 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
4863   \setslot{\lc{F}{f}}
4864     \ifnumber{\int{ligaturing}}>{0}\then
4865       \ligature{LIG}{\lc{I}{i}}{\lclig{FI}{fi}}
4866       \ligature{LIG}{\lc{F}{f}}{\lclig{FF}{ff}}
4867       \ligature{LIG}{\lc{L}{l}}{\lclig{FL}{fl}}
4868     \Fi
4869     \comment{The letter '{f}'.}
4870   \endsetslot
4871
4872 \Fi
4873
4874 \setslot{\lc{G}{g}}
4875   \comment{The letter '{g}'.}
4876 \endsetslot
4877
4878 \setslot{\lc{H}{h}}
4879   \comment{The letter '{h}'.}
4880 \endsetslot
4881
4882 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
4883   \setslot{\lc{I}{i}}
4884     \comment{The letter '{i}'.}
4885   \endsetslot
4886
4887 \Fi
4888
4889 \setslot{\lc{J}{j}}
4890   \comment{The letter '{j}'.}
4891 \endsetslot
4892
4893 \setslot{\lc{K}{k}}
4894   \comment{The letter '{k}'.}
4895 \endsetslot
4896
4897 \setslot{\lc{L}{l}}
4898   \comment{The letter '{l}'.}
4899 \endsetslot
4900

```

```
4901 \setslot{\lc{L}{l}}
4902   \comment{The letter '{l}'.}
4903 \endsetslot
4904
4905 \setslot{\lc{M}{m}}
4906   \comment{The letter '{m}'.}
4907 \endsetslot
4908
4909 \setslot{\lc{N}{n}}
4910   \comment{The letter '{n}'.}
4911 \endsetslot
4912
4913 \setslot{\lc{O}{o}}
4914   \comment{The letter '{o}'.}
4915 \endsetslot
4916
4917 \setslot{\lc{P}{p}}
4918   \comment{The letter '{p}'.}
4919 \endsetslot
4920
4921 \setslot{\lc{Q}{q}}
4922   \comment{The letter '{q}'.}
4923 \endsetslot
4924
4925 \setslot{\lc{R}{r}}
4926   \comment{The letter '{r}'.}
4927 \endsetslot
4928
4929 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
4930
4931   \setslot{\lc{S}{s}}
4932     \comment{The letter '{s}'.}
4933   \endsetslot
4934
4935 \Fi
4936
4937 \setslot{\lc{T}{t}}
4938   \comment{The letter '{t}'.}
4939 \endsetslot
4940
4941 \setslot{\lc{U}{u}}
4942   \comment{The letter '{u}'.}
4943 \endsetslot
4944
4945 \setslot{\lc{V}{v}}
4946   \comment{The letter '{v}'.}
4947 \endsetslot
4948
4949 \setslot{\lc{W}{w}}
4950   \comment{The letter '{w}'.}
4951 \endsetslot
4952
4953 \setslot{\lc{X}{x}}
4954   \comment{The letter '{x}'.}
```

```
4955 \endsetslot
4956
4957 \setslot{\lc{Y}{y}}
4958   \comment{The letter '{y}'.}
4959 \endsetslot
4960
4961 \setslot{\lc{Z}{z}}
4962   \comment{The letter '{z}'.}
4963 \endsetslot
4964
4965 \setslot{braceleft.inferior}
4966   \comment{The opening curly brace '\textbraceleft'.}
4967 \endsetslot
4968
4969 \setslot{bar.inferior}
4970   \comment{The ASCII vertical bar '\textbar'.
4971     This is included for compatibility with typewriter fonts used
4972     for computer listings.}
4973 \endsetslot
4974
4975 \setslot{braceright.inferior}
4976   \comment{The closing curly brace '\textbraceright'.}
4977 \endsetslot
4978
4979 \setslot{asciitilde.inferior}
4980   \comment{The ASCII tilde '\textasciitilde'.
4981     This is included for compatibility with typewriter fonts used
4982     for computer listings.}
4983 \endsetslot
4984
4985 \setslot{hyphenchar.inferior}
4986   \comment{The glyph used for hyphenation in this font, which will
4987     almost always be the same as 'hyphen'.}
4988 \endsetslot
4989
4990 \setslot{\uctop{Abreve}{abreve}}
4991   \comment{The letter '\u A'.}
4992 \endsetslot
4993
4994 \setslot{\uc{Aogonek}{aogonek}}
4995   \comment{The letter '\k A'.}
4996 \endsetslot
4997
4998 \setslot{\uctop{Cacute}{cacute}}
4999   \comment{The letter '\ C'.}
5000 \endsetslot
5001
5002 \setslot{\uctop{Ccaron}{ccaron}}
5003   \comment{The letter '\v C'.}
5004 \endsetslot
5005
5006 \setslot{\uctop{Dcaron}{dcaron}}
5007   \comment{The letter '\v D'.}
5008 \endsetslot
```

```
5009 \setslot{\uctop{Ecaron}{ecaron}}
5010   \comment{The letter '\v E'.}
5011 \endsetslot
5013
5014 \setslot{\uc{Eogonek}{eogonek}}
5015   \comment{The letter '\k E'.}
5016 \endsetslot
5017
5018 \setslot{\uctop{Gbreve}{gbreve}}
5019   \comment{The letter '\u G'.}
5020 \endsetslot
5021
5022 \setslot{\uctop{Lacute}{lacute}}
5023   \comment{The letter '\` L'.}
5024 \endsetslot
5025
5026 \setslot{\uc{Lcaron}{lcaron}}
5027   \comment{The letter '\v L'.}
5028 \endsetslot
5029
5030 \setslot{\uc{Lslash}{lslash}}
5031   \comment{The letter '\L'.}
5032 \endsetslot
5033
5034 \setslot{\uctop{Nacute}{nacute}}
5035   \comment{The letter '\` N'.}
5036 \endsetslot
5037
5038 \setslot{\uctop{Ncaron}{ncaron}}
5039   \comment{The letter '\v N'.}
5040 \endsetslot
5041
5042 \setslot{\uc{Eng}{eng}}
5043   \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
      to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
      seems.}
5044 \endsetslot
5045
5046 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
5047   \comment{The letter '\H O'.}
5048 \endsetslot
5049
5050 \setslot{\uctop{Racute}{racute}}
5051   \comment{The letter '\` R'.}
5052 \endsetslot
5053
5054 \setslot{\uctop{Rcaron}{rcaron}}
5055   \comment{The letter '\v R'.}
5056 \endsetslot
5057
5058 \setslot{\uctop{Sacute}{sacute}}
5059   \comment{The letter '\` S'.}
5060 \endsetslot
```

```

5061 \setslot{\uctop{Scaron}{scaron}}
5062   \comment{The letter '\v S'.}
5063 \endsetslot
5064
5065 \setslot{\uc{Scedilla}{scedilla}}
5066   \comment{The letter '\c S'.}
5067 \endsetslot
5068
5069 \setslot{\uctop{Tcaron}{tcaron}}
5070   \comment{The letter '\v T'.}
5071 \endsetslot
5072
5073 \setslot{\uc{Tcedilla}{tcedilla}}
5074   \comment{The letter '\c T'.}
5075 \endsetslot
5076
5077 \setslot{\uctop{Uhngarumlaut}{uhngarumlaut}}
5078   \comment{The letter '\H U'.}
5079 \endsetslot
5080
5081 \setslot{\uctop{Uring}{uring}}
5082   \comment{The letter '\r U'.}
5083 \endsetslot
5084
5085 \setslot{\uctop{Ydieresis}{ydieresis}}
5086   \comment{The letter '\Y'.}
5087 \endsetslot
5088
5089 \setslot{\uctop{Zacute}{zacute}}
5090   \comment{The letter '\ Z'.}
5091 \endsetslot
5092
5093 \setslot{\uctop{Zcaron}{zcaron}}
5094   \comment{The letter '\v Z'.}
5095 \endsetslot
5096
5097 \setslot{\uctop{Zdotaccent}{zdotaccent}}
5098   \comment{The letter '\. Z'.}
5099 \endsetslot
5100
5101 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
5102
5103 \setslot{\uclig{IJ}{ij}}
5104   \comment{The letter 'IJ'. This is a single letter, and in a
5105     monowidth font should ideally be one letter wide.}
5106 \endsetslot
5107
5108 \Fi
5109
5110 \setslot{\uctop{Idotaccent}{idotaccent}}
5111   \comment{The letter '\. I'.}
5112 \endsetslot
5113
5114

```

```
5115 \setslot{\lc{Dbar}{dbar}}
5116   \comment{The letter '\dj'.}
5117 \endsetslot
5118
5119 \setslot{section.inferior}
5120   \comment{The section mark '\textsection'.}
5121 \endsetslot
5122
5123 \setslot{\lctop{Abreve}{abreve}}
5124   \comment{The letter '\u a'.}
5125 \endsetslot
5126
5127 \setslot{\lc{Aogonek}{aogonek}}
5128   \comment{The letter '\k a'.}
5129 \endsetslot
5130
5131 \setslot{\lctop{Cacute}{cacute}}
5132   \comment{The letter '\c c'.}
5133 \endsetslot
5134
5135 \setslot{\lctop{Ccaron}{ccaron}}
5136   \comment{The letter '\v c'.}
5137 \endsetslot
5138
5139 \setslot{\lctop{Dcaron}{dcaron}}
5140   \comment{The letter '\v d'.}
5141 \endsetslot
5142
5143 \setslot{\lctop{Ecaron}{ecaron}}
5144   \comment{The letter '\v e'.}
5145 \endsetslot
5146
5147 \setslot{\lc{Eogonek}{eogonek}}
5148   \comment{The letter '\k e'.}
5149 \endsetslot
5150
5151 \setslot{\lctop{Gbreve}{gbreve}}
5152   \comment{The letter '\u g'.}
5153 \endsetslot
5154
5155 \setslot{\lctop{Lacute}{lacute}}
5156   \comment{The letter '\l'.}
5157 \endsetslot
5158
5159 \setslot{\lc{Lcaron}{lcaron}}
5160   \comment{The letter '\v l'.}
5161 \endsetslot
5162
5163 \setslot{\lc{Lslash}{lslash}}
5164   \comment{The letter '\l'.}
5165 \endsetslot
5166
5167 \setslot{\lctop{Nacute}{nacute}}
5168   \comment{The letter '\n'.}
```

```
5169 \endsetslot
5170
5171 \setslot{\lctop{Ncaron}{ncaron}}
5172   \comment{The letter '\v n'.}
5173 \endsetslot
5174
5175 \setslot{\lc{Eng}{eng}}
5176   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
      to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.tex in most cases,
      it seems.}
5177 \endsetslot
5178
5179 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
5180   \comment{The letter '\H o'.}
5181 \endsetslot
5182
5183 \setslot{\lctop{Racute}{racute}}
5184   \comment{The letter '\r'.}
5185 \endsetslot
5186
5187 \setslot{\lctop{Rcaron}{rcaron}}
5188   \comment{The letter '\v r'.}
5189 \endsetslot
5190
5191 \setslot{\lctop{Sacute}{sacute}}
5192   \comment{The letter '\s'.}
5193 \endsetslot
5194
5195 \setslot{\lctop{Scaron}{scaron}}
5196   \comment{The letter '\v s'.}
5197 \endsetslot
5198
5199 \setslot{\lc{Scedilla}{scedilla}}
5200   \comment{The letter '\c s'.}
5201 \endsetslot
5202
5203 \setslot{\lctop{Tcaron}{tcaron}}
5204   \comment{The letter '\v t'.}
5205 \endsetslot
5206
5207 \setslot{\lc{Tcedilla}{tcedilla}}
5208   \comment{The letter '\c t'.}
5209 \endsetslot
5210
5211 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
5212   \comment{The letter '\H u'.}
5213 \endsetslot
5214
5215 \setslot{\lctop{Uring}{uring}}
5216   \comment{The letter '\r u'.}
5217 \endsetslot
5218
5219 \setslot{\lctop{Ydieresis}{ydieresis}}
5220   \comment{The letter '\y'.}
```

```
5221 \endsetslot
5222
5223 \setslot{\lctop{Zacute}{zacute}}
5224     \comment{The letter '\` z'.}
5225 \endsetslot
5226
5227 \setslot{\lctop{Zcaron}{zcaron}}
5228     \comment{The letter '\v z'.}
5229 \endsetslot
5230
5231 \setslot{\lctop{Zdotaccent}{zdotaccent}}
5232     \comment{The letter '\. z'.}
5233 \endsetslot
5234
5235 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
5236
5237 \setslot{\lclig{IJ}{ij}}
5238     \comment{The letter 'ij'. This is a single letter, and in a
5239     monowidth font should ideally be one letter wide.}
5240 \endsetslot
5241
5242 \Fi
5243
5244 \setslot{exclamdown.inferior}
5245     \comment{The Spanish punctuation mark '!' .}
5246 \endsetslot
5247
5248 \setslot{questiondown.inferior}
5249     \comment{The Spanish punctuation mark '?' .}
5250 \endsetslot
5251
5252 \setslot{sterling.inferior}
5253     \comment{The British currency mark '\textsterling' .}
5254 \endsetslot
5255
5256 \setslot{\uctop{Agrave}{agrave}}
5257     \comment{The letter '\` A'.}
5258 \endsetslot
5259
5260 \setslot{\uctop{Aacute}{aacute}}
5261     \comment{The letter '\` A'.}
5262 \endsetslot
5263
5264 \setslot{\uctop{Acircumflex}{acircumflex}}
5265     \comment{The letter '\^ A'.}
5266 \endsetslot
5267
5268 \setslot{\uctop{Atilde}{atilde}}
5269     \comment{The letter '\~ A'.}
5270 \endsetslot
5271
5272 \setslot{\uctop{Adieresis}{adieresis}}
5273     \comment{The letter '\u00f6 A'.}
5274 \endsetslot
```

```
5275 \setslot{\uctop{Aring}{aring}}
5276   \comment{The letter '\r A'.}
5277 \endsetslot
5279
5280 \setslot{\uc{AE}{ae}}
5281   \comment{The letter '\AE'. This is a single letter, and should not be
5282     faked with 'AE'.}
5283 \endsetslot
5284
5285 \setslot{\uc{Ccedilla}{ccedilla}}
5286   \comment{The letter '\c C'.}
5287 \endsetslot
5288
5289 \setslot{\uctop{Egrave}{egrave}}
5290   \comment{The letter '\` E'.}
5291 \endsetslot
5292
5293 \setslot{\uctop{Eacute}{eacute}}
5294   \comment{The letter '\^ E'.}
5295 \endsetslot
5296
5297 \setslot{\uctop{Ecircumflex}{ecircumflex}}
5298   \comment{The letter '\^ E'.}
5299 \endsetslot
5300
5301 \setslot{\uctop{Edieresis}{edieresis}}
5302   \comment{The letter '\u00f4 E'.}
5303 \endsetslot
5304
5305 \setslot{\uctop{Igrave}{igrave}}
5306   \comment{The letter '\` I'.}
5307 \endsetslot
5308
5309 \setslot{\uctop{Iacute}{iacute}}
5310   \comment{The letter '\^ I'.}
5311 \endsetslot
5312
5313 \setslot{\uctop{Icircumflex}{icircumflex}}
5314   \comment{The letter '\^ I'.}
5315 \endsetslot
5316
5317 \setslot{\uctop{Idieresis}{idieresis}}
5318   \comment{The letter '\u00f4 I'.}
5319 \endsetslot
5320
5321 \setslot{\uc{Eth}{eth}}
5322   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
5323     with a horizontal bar through the stem. It is unavailable
5324     in \plain\ \TeX.}
5325 \endsetslot
5326
5327 \setslot{\uctop{Ntilde}{ntilde}}
5328   \comment{The letter '\~ N'.
```

```

5329 \endsetslot
5330
5331 \setslot{\uctop{0grave}{ograve}}
5332   \comment{The letter '\`0'.}
5333 \endsetslot
5334
5335 \setslot{\uctop{0acute}{oacute}}
5336   \comment{The letter '\^0'.}
5337 \endsetslot
5338
5339 \setslot{\uctop{0circumflex}{ocircumflex}}
5340   \comment{The letter '\~0'.}
5341 \endsetslot
5342
5343 \setslot{\uctop{0tilde}{otilde}}
5344   \comment{The letter '\~\0'.}
5345 \endsetslot
5346
5347 \setslot{\uctop{0dieresis}{odieresis}}
5348   \comment{The letter '\\"0'.}
5349 \endsetslot
5350
5351 \setslot{\uc{OE}{oe}}
5352   \comment{The letter '\OE'. This is a single letter, and should not be
5353     faked with 'OE'.}
5354 \endsetslot
5355
5356 \setslot{\uc{0slash}{oslash}}
5357   \comment{The letter '\0'.}
5358 \endsetslot
5359
5360 \setslot{\uctop{Ugrave}{ugrave}}
5361   \comment{The letter '\`U'.}
5362 \endsetslot
5363
5364 \setslot{\uctop{Uacute}{uacute}}
5365   \comment{The letter '\^U'.}
5366 \endsetslot
5367
5368 \setslot{\uctop{Ucircumflex}{ucircumflex}}
5369   \comment{The letter '\~U'.}
5370 \endsetslot
5371
5372 \setslot{\uctop{Udieresis}{udieresis}}
5373   \comment{The letter '\\"U'.}
5374 \endsetslot
5375
5376 \setslot{\uctop{Yacute}{yacute}}
5377   \comment{The letter '\^Y'.}
5378 \endsetslot
5379
5380 \setslot{\uc{Thorn}{thorn}}
5381   \comment{The Icelandic capital letter Thorn, similar to a 'P'
5382     with the bowl moved down. It is unavailable in \plain\ \TeX.}

```

```
5383 \endsetslot
5384
5385 \setslot{\uclig{SS}{germandbls}}
5386     \comment{The ligature 'SS', used to give an upper case '\ss'.
5387             In a monowidth font it should be two letters wide.}
5388 \endsetslot
5389
5390 \setslot{\lctop{Agrave}{agrave}}
5391     \comment{The letter '\` a'.}
5392 \endsetslot
5393
5394 \setslot{\lctop{Aacute}{aacute}}
5395     \comment{The letter '\^ a'.}
5396 \endsetslot
5397
5398 \setslot{\lctop{Acircumflex}{acircumflex}}
5399     \comment{The letter '\~ a'.}
5400 \endsetslot
5401
5402 \setslot{\lctop{Atilde}{atilde}}
5403     \comment{The letter '\~ a'.}
5404 \endsetslot
5405
5406 \setslot{\lctop{Adieresis}{adieresis}}
5407     \comment{The letter '\u00e4 a'.}
5408 \endsetslot
5409
5410 \setslot{\lctop{Aring}{aring}}
5411     \comment{The letter '\r a'.}
5412 \endsetslot
5413
5414 \setslot{\lc{AE}{ae}}
5415     \comment{The letter '\ae'. This is a single letter, and should not be
5416             faked with 'ae'.}
5417 \endsetslot
5418
5419 \setslot{\lc{Ccedilla}{ccedilla}}
5420     \comment{The letter '\c c'.}
5421 \endsetslot
5422
5423 \setslot{\lctop{Egrave}{egrave}}
5424     \comment{The letter '\` e'.}
5425 \endsetslot
5426
5427 \setslot{\lctop{Eacute}{eacute}}
5428     \comment{The letter '\^ e'.}
5429 \endsetslot
5430
5431 \setslot{\lctop{Ecircumflex}{ecircumflex}}
5432     \comment{The letter '\~ e'.}
5433 \endsetslot
5434
5435 \setslot{\lctop{Edieresis}{edieresis}}
5436     \comment{The letter '\u00e4 e'.}
```

```

5437 \endsetslot
5438
5439 \setslot{\lctop{Igrave}{igrave}}
5440   \comment{The letter '\`i'.}
5441 \endsetslot
5442
5443 \setslot{\lctop{Iacute}{iacute}}
5444   \comment{The letter '\^i'.}
5445 \endsetslot
5446
5447 \setslot{\lctop{Icircumflex}{icircumflex}}
5448   \comment{The letter '\~i'.}
5449 \endsetslot
5450
5451 \setslot{\lctop{Idieresis}{idieresis}}
5452   \comment{The letter '\u00fci'.}
5453 \endsetslot
5454
5455 \setslot{\lc{Eth}{eth}}
5456   \comment{The Icelandic lowercase letter 'eth' similar to
5457     a '$\partial$' with an oblique bar through the stem.
5458     It is unavailable in \plain\ \TeX.}
5459 \endsetslot
5460
5461 \setslot{\lctop{Ntilde}{ntilde}}
5462   \comment{The letter '\~n'.}
5463 \endsetslot
5464
5465 \setslot{\lctop{Ograve}{ograve}}
5466   \comment{The letter '\`o'.}
5467 \endsetslot
5468
5469 \setslot{\lctop{Oacute}{oacute}}
5470   \comment{The letter '\^o'.}
5471 \endsetslot
5472
5473 \setslot{\lctop{Ocircumflex}{ocircumflex}}
5474   \comment{The letter '\~o'.}
5475 \endsetslot
5476
5477 \setslot{\lctop{Otilde}{otilde}}
5478   \comment{The letter '\~o'.}
5479 \endsetslot
5480
5481 \setslot{\lctop{Odieresis}{odieresis}}
5482   \comment{The letter '\u00fco'.}
5483 \endsetslot
5484
5485 \setslot{\lc{OE}{oe}}
5486   \comment{The letter 'oe'. This is a single letter, and should not be
5487     faked with 'oe'.}
5488 \endsetslot
5489
5490 \setslot{\lc{Oslash}{oslash}}

```

```

5491     \comment{The letter '\o'.}
5492     \endsetslot
5493
5494 \setslot{\lctop{Ugrave}{ugrave}}
5495     \comment{The letter '\` u'.}
5496 \endsetslot
5497
5498 \setslot{\lctop{Uacute}{uacute}}
5499     \comment{The letter '\^ u'.}
5500 \endsetslot
5501
5502 \setslot{\lctop{Ucircumflex}{ucircumflex}}
5503     \comment{The letter '\~ u'.}
5504 \endsetslot
5505
5506 \setslot{\lctop{Udieresis}{udieresis}}
5507     \comment{The letter '\\" u'.}
5508 \endsetslot
5509
5510 \setslot{\lctop{Yacute}{yacute}}
5511     \comment{The letter '\` y'.}
5512 \endsetslot
5513
5514 \setslot{\lc{Thorn}{thorn}}
5515     \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
      with an ascender rising from the stem. It is unavailable
      in \plain\ \TeX.}
5516
5517 \endsetslot
5518
5519
5520 \setslot{\lc{SS}{germandbls}}
5521     \comment{The letter '\ss'.}
5522 \endsetslot
5523
5524 \endencoding

```

#### 4.3.10 t1-dotsup.etx

*t1-dotsup.etx (etx)*

```

5525 %%
5526 %% - The original notices at the top of that file concerning authors,
5527 %% maintenance etc. are replaced by this notice.
5528 %% - The file is renamed.
5529 %% - The encoding name is modified.
5530 %% - The file is modified to accommodate differences in glyph names.
5531 %% - The file is modified for use in encoding superiors.
5532 %%
5533 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
5534 \relax
5535 \encoding
5536
5537 \needsfontinstversion{1.910}
5538

```

```

5539 \setcommand\lc#1#2{\#2.superior}
5540 \setcommand\uc#1#2{\#1.superior}
5541 \setcommand\lctop#1#2{\#2.superior}
5542 \setcommand\uctop#1#2{\#1.superior}
5543 \setcommand\lclig#1#2{\#2.superior}
5544 \ifisint{letterspacing}\then
5545   \ifnumber{\int{letterspacing}}={0}\then \Else
5546     \setcommand\uclig#1#2{\#1spaced}
5547     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but
5548       you can't see it as \verb|\verb|\setcommand| commands are invisible in
5549       the typeset output.}
5550   \Fi
5551 \Fi
5552 \setcommand\uclig#1#2{\#1.superior}
5553 \setcommand\digit#1{\#1.superior}
5554
5555 \ifisint{monowidth}\then
5556   \setint{ligaturing}{0}
5557 \Else
5558   % The following empty line is *important* to get the formatting
5559   % right here (sigh)! (Remember that it is a \par token.)
5560
5561 \ifisint{letterspacing}\then
5562   \ifnumber{\int{letterspacing}}={0}\then \Else
5563     \setint{ligaturing}{0}
5564   \Fi
5565 \Fi
5566 \setint{ligaturing}{1}
5567 \Fi
5568
5569 \setint{italicslant}{0}
5570 \setint{quad}{1000}
5571 \setint{baselineskip}{1200}
5572
5573 \ifisglyph{x}\then
5574   \setint{xheight}{\height{x}}
5575 \Else
5576   \setint{xheight}{500}
5577 \Fi
5578
5579 \ifisglyph{space}\then
5580   \setint{interword}{\width{space}}
5581 \Else\ifisglyph{i}\then
5582   \setint{interword}{\width{i}}
5583 \Else
5584   \setint{interword}{333}
5585 \Fi\Fi
5586
5587 \ifisint{monowidth}\then
5588   \setint{stretchword}{0}
5589   \setint{shrinkword}{0}
5590   \setint{extraspace}{\int{interword}}
5591 \Else
5592   \setint{stretchword}{\scale{\int{interword}}{600}}

```

```

5593   \setint{shrinkword}{\scale{\int{interword}}{240}}
5594   \setint{extraspace}{\scale{\int{interword}}{240}}
5595 \Fi
5596
5597 \ifisglyph{X}\then
5598   \setint{capheight}{\height{X}}
5599 \Else
5600   \setint{capheight}{750}
5601 \Fi
5602
5603 \ifisglyph{d}\then
5604   \setint{ascender}{\height{d}}
5605 \Else\ifisint{capheight}\then
5606   \setint{ascender}{\int{capheight}}
5607 \Else
5608   \setint{ascender}{750}
5609 \Fi\Fi
5610
5611 \ifisglyph{Aring}\then
5612   \setint{acccapheight}{\height{Aring}}
5613 \Else
5614   \setint{acccapheight}{999}
5615 \Fi
5616
5617 \ifisint{descender_neg}\then
5618   \setint{descender}{\neg{\int{descender_neg}}}
5619 \Else\ifisglyph{p}\then
5620   \setint{descender}{\depth{p}}
5621 \Else
5622   \setint{descender}{250}
5623 \Fi\Fi
5624
5625 \ifisglyph{Aring}\then
5626   \setint{maxheight}{\height{Aring}}
5627 \Else
5628   \setint{maxheight}{1000}
5629 \Fi
5630
5631 \ifisint{maxdepth_neg}\then
5632   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
5633 \Else\ifisglyph{j}\then
5634   \setint{maxdepth}{\depth{j}}
5635 \Else
5636   \setint{maxdepth}{250}
5637 \Fi\Fi
5638
5639 \ifisglyph{six}\then
5640   \setint{digitwidth}{\width{six}}
5641 \Else
5642   \setint{digitwidth}{500}
5643 \Fi
5644
5645 \setint{capstem}{0} % not in AFM files
5646

```

```

5647 \setfontdimen{1}{italicslant}          % italic slant
5648 \setfontdimen{2}{interword}            % interword space
5649 \setfontdimen{3}{stretchword}          % interword stretch
5650 \setfontdimen{4}{shrinkword}          % interword shrink
5651 \setfontdimen{5}{xheight}             % x-height
5652 \setfontdimen{6}{quad}                % quad
5653 \setfontdimen{7}{extraspace}          % extra space after .
5654 \setfontdimen{8}{capheight}           % cap height
5655 \setfontdimen{9}{ascender}            % ascender
5656 \setfontdimen{10}{accicapheight}       % accented cap height
5657 \setfontdimen{11}{descender}           % descender's depth
5658 \setfontdimen{12}{maxheight}           % max height
5659 \setfontdimen{13}{maxdepth}            % max depth
5660 \setfontdimen{14}{digitwidth}          % digit width
5661 \setfontdimen{15}{verticalstem}        % dominant width of vertical stems
5662 \setfontdimen{16}{baselineskip}         % baselineskip

5663
5664 \ifnumber{\int{ligaturing}}<0\then
5665   \comment{In this case, the codingscheme can be different from the
5666   default, and therefore we refrain from setting it.}
5667 \Else
5668   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTSUP}
5669 \Fi

5670
5671 \setslot{\lc{Grave}{grave}}
5672   \comment{The grave accent '\{}.'}
5673 \endsetslot

5674
5675 \setslot{\lc{Acute}{acute}}
5676   \comment{The acute accent '\{}.'}
5677 \endsetslot

5678
5679 \setslot{\lc{Circumflex}{circumflex}}
5680   \comment{The circumflex accent '\^{}.'}
5681 \endsetslot

5682
5683 \setslot{\lc{Tilde}{tilde}}
5684   \comment{The tilde accent '\~{}.'}
5685 \endsetslot

5686
5687 \setslot{\lc{Dieresis}{dieresis}}
5688   \comment{The umlaut or dieresis accent '\\"{}.'}
5689 \endsetslot

5690
5691 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
5692   \comment{The long Hungarian umlaut '\H{}.'}
5693 \endsetslot

5694
5695 \setslot{\lc{Ring}{ring}}
5696   \comment{The ring accent '\r{}.'}
5697 \endsetslot

5698
5699 \setslot{\lc{Caron}{caron}}
5700   \comment{The caron or h'áv cek accent '\v{}.'}

```

```

5701 \endsetslot
5702
5703 \setslot{\lc{Breve}{breve}}
5704   \comment{The breve accent '\u{ }'.}
5705 \endsetslot
5706
5707 \setslot{\lc{Macron}{macron}}
5708   \comment{The macron accent '\={ }'.}
5709 \endsetslot
5710
5711 \setslot{\lc{Dotaccent}{dotaccent}}
5712   \comment{The dot accent '\.{ }'.}
5713 \endsetslot
5714
5715 \setslot{\lc{Cedilla}{cedilla}}
5716   \comment{The cedilla accent '\c { }'.}
5717 \endsetslot
5718
5719 \setslot{\lc{Ogonek}{ogonek}}
5720   \comment{The ogonek accent '\k { }'.}
5721 \endsetslot
5722
5723 \setslot{quotesinglbase.superior}
5724   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
5725       but with different sidebearings.}
5726 \endsetslot
5727
5728 \setslot{guilsinglleft.superior}
5729   \comment{A French single opening quote mark '\guilsinglleft',
5730       unavailable in \plain\ \TeX.}
5731 \endsetslot
5732
5733 \setslot{guilsinglright.superior}
5734   \comment{A French single closing quote mark '\guilsinglright',
5735       unavailable in \plain\ \TeX.}
5736 \endsetslot
5737
5738 \setslot{quotedblleft.superior}
5739   \comment{The English opening quote mark '\,\textquotedblleft\,'.}
5740 \endsetslot
5741
5742 \setslot{quotedblright.superior}
5743   \comment{The English closing quote mark '\,\textquotedblright\,'.}
5744 \endsetslot
5745
5746 \setslot{quotedblbase.superior}
5747   \comment{A German double quote mark '\quotedblbase' similar to two commas,
5748       but with tighter letterspacing and different sidebearings.}
5749 \endsetslot
5750
5751 \setslot{guillemotleft.superior}
5752   \comment{A French double opening quote mark '\guillemotleft',
5753       unavailable in \plain\ \TeX.}
5754 \endsetslot

```

```

5755 \setslot{guillemotright.superior}
5756   \comment{A French closing opening quote mark ‘\guillemotright’,
5757     unavailable in \plain\ \TeX.}
5758 \endsetslot
5760
5761 \setslot{endash.superior}
5762   \ligature[LIG]{hyphen.superior}{emdash.superior}
5763   \comment{The number range dash ‘1--9’.
5764     This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
5765     called ‘endash’ to work right.
5766     The ‘\textendash’.
5767     In a monowidth font, this might be set as ‘\texttt{1{-}9}’.}
5768 \endsetslot
5769
5770 \setslot{emdash.superior}
5771   \comment{The punctuation dash ‘Oh---boy.’
5772     This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
5773     called ‘emdash’ to work right.
5774     The ‘\textemdash’.
5775     In a monowidth font, this might be set as ‘\texttt{Oh{-}{-}boy.}’}
5776 \endsetslot
5777
5778 \setslot{compwordmark.superior}
5779   \comment{An invisible glyph, with zero width and depth, but the
5780     height of lowercase letters without ascenders.
5781     It is used to stop ligaturing in words like ‘shelf{}ful’.}
5782 \endsetslot
5783
5784 \setslot{perthousandzero.superior}
5785   \comment{A glyph which is placed after ‘\%’ to produce a
5786     ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
5787     Your guess is as good as mine as to what this glyph should look
5788     like in a monowidth font.}
5789 \endsetslot
5790
5791 \setslot{\lc{dotlessI}{dotlessi}}
5792   \comment{A dotless i ‘\i’, used to produce accented letters such as
5793     ‘\=\i’.}
5794 \endsetslot
5795
5796 \setslot{\lc{dotlessJ}{dotlessj}}
5797   \comment{A dotless j ‘\j’, used to produce accented letters such as
5798     ‘\=\j’. Most non-\TeX\ fonts do not have this glyph.}
5799 \endsetslot
5800
5801 \ifnumber{\int{ligaturing}}<0\then \skipslots{5}\Else
5802
5803 \setslot{\lc{lig{FF}{ff}}}
5804   \ifnumber{\int{ligaturing}}>0\then
5805     \ligature[LIG]{\lc{I}{i}}{\lc{lig{FFI}{ffi}}}
5806     \ligature[LIG]{\lc{L}{l}}{\lc{lig{FFL}{ffl}}}
5807 \Fi
5808   \comment{The ‘ff’ ligature. It should be two characters wide in a

```

```

5809     monowidth font.}
5810 \endsetslot
5811
5812 \setslot{\lclig{FI}{fi}}
5813   \comment{The 'fi' ligature. It should be two characters wide in a
5814     monowidth font.}
5815 \endsetslot
5816
5817 \setslot{\lclig{FL}{fl}}
5818   \comment{The 'fl' ligature. It should be two characters wide in a
5819     monowidth font.}
5820 \endsetslot
5821
5822 \setslot{\lclig{FFI}{ffi}}
5823   \comment{The 'ffi' ligature. It should be three characters wide in a
5824     monowidth font.}
5825 \endsetslot
5826
5827 \setslot{\lclig{FFL}{ffl}}
5828   \comment{The 'ffl' ligature. It should be three characters wide in a
5829     monowidth font.}
5830 \endsetslot
5831
5832 \Fi
5833
5834 \setslot{visiblespace.superior}
5835   \comment{A visible space glyph '\textvisiblespace'.}
5836 \endsetslot
5837
5838 \setslot{exclam.superior}
5839   \ligature{LIG}{quotelleft.superior}{exclandown.superior}
5840   \comment{The exclamation mark '!'.}
5841 \endsetslot
5842
5843 \setslot{quotedbl.superior}
5844   \comment{The 'neutral' double quotation mark '\textquotedbl',,
5845     included for use in monowidth fonts, or for setting computer
5846     programs. Note that the inclusion of this glyph in this slot
5847     means that \TeX\ documents which used '{\tt\char"} as an
5848     input character will no longer work.}
5849 \endsetslot
5850
5851 \setslot{numbersign.superior}
5852   \comment{The hash sign '\#'.}
5853 \endsetslot
5854
5855 \setslot{dollar.superior}
5856   \comment{The dollar sign '\$'.}
5857 \endsetslot
5858
5859 \setslot{percent.superior}
5860   \comment{The percent sign '\%'.}
5861 \endsetslot
5862

```

```
5863 \setslot{ampersand.superior}
5864     \comment{The ampersand sign '&'.}
5865 \endsetslot
5866
5867 \setslot{quoteright.superior}
5868     \ligature{LIG}{quoteright.superior}{quotedblright.superior}
5869     \comment{The English closing single quote mark '\textquoteright,'.}
5870 \endsetslot
5871
5872 \setslot{parenleft.superior}
5873     \comment{The opening parenthesis '('.}
5874 \endsetslot
5875
5876 \setslot{parenright.superior}
5877     \comment{The closing parenthesis ')'.}
5878 \endsetslot
5879
5880 \setslot{asterisk.superior}
5881     \comment{The raised asterisk '*' .}
5882 \endsetslot
5883
5884 \setslot{plus.superior}
5885     \comment{The addition sign '+' .}
5886 \endsetslot
5887
5888 \setslot{comma.superior}
5889     \ligature{LIG}{comma.superior}{quotedblbase.superior}
5890     \comment{The comma ',' .}
5891 \endsetslot
5892
5893 \setslot{hyphen.superior}
5894     \ligature{LIG}{hyphen.superior}{endash.superior}
5895     \ligature{LIG}{hyphenchar.superior}{hyphenchar.superior}
5896     \comment{The hyphen '-' .}
5897 \endsetslot
5898
5899 \setslot{period.superior}
5900     \comment{The period '.' .}
5901 \endsetslot
5902
5903 \setslot{slash.superior}
5904     \comment{The forward oblique '/'.}
5905 \endsetslot
5906
5907 \setslot{\digit{zero}}
5908     \comment{The number '0'. This (and all the other numerals) may be
5909         old style or ranging digits.}
5910 \endsetslot
5911
5912 \setslot{\digit{one}}
5913     \comment{The number '1'.}
5914 \endsetslot
5915
5916 \setslot{\digit{two}}
```

```
5917     \comment{The number '2'.}
5918 \endsetslot
5919
5920 \setslot{\digit{three}}
5921     \comment{The number '3'.}
5922 \endsetslot
5923
5924 \setslot{\digit{four}}
5925     \comment{The number '4'.}
5926 \endsetslot
5927
5928 \setslot{\digit{five}}
5929     \comment{The number '5'.}
5930 \endsetslot
5931
5932 \setslot{\digit{six}}
5933     \comment{The number '6'.}
5934 \endsetslot
5935
5936 \setslot{\digit{seven}}
5937     \comment{The number '7'.}
5938 \endsetslot
5939
5940 \setslot{\digit{eight}}
5941     \comment{The number '8'.}
5942 \endsetslot
5943
5944 \setslot{\digit{nine}}
5945     \comment{The number '9'.}
5946 \endsetslot
5947
5948 \setslot{colon.superior}
5949     \comment{The colon punctuation mark ':' .}
5950 \endsetslot
5951
5952 \setslot{semicolon.superior}
5953     \comment{The semi-colon punctuation mark ';' .}
5954 \endsetslot
5955
5956 \setslot{less.superior}
5957     \ligature[LIG]{less.superior}{guillemotleft.superior}
5958     \comment{The less-than sign '\textless' .}
5959 \endsetslot
5960
5961 \setslot{equal.superior}
5962     \comment{The equals sign '=' .}
5963 \endsetslot
5964
5965 \setslot{greater.superior}
5966     \ligature[LIG]{greater.superior}{guillemotright.superior}
5967     \comment{The greater-than sign '\textgreater' .}
5968 \endsetslot
5969
5970 \setslot{question.superior}
```

```
5971     \ligature{LIG}{quotyleft.superior}{questiondown.superior}
5972     \comment{The question mark '?' .}
5973 \endsetslot
5974
5975 \setslot{at.superior}
5976     \comment{The at sign '@' .}
5977 \endsetslot
5978
5979 \setslot{\uc{A}{a}}
5980     \comment{The letter '{A}' .}
5981 \endsetslot
5982
5983 \setslot{\uc{B}{b}}
5984     \comment{The letter '{B}' .}
5985 \endsetslot
5986
5987 \setslot{\uc{C}{c}}
5988     \comment{The letter '{C}' .}
5989 \endsetslot
5990
5991 \setslot{\uc{D}{d}}
5992     \comment{The letter '{D}' .}
5993 \endsetslot
5994
5995 \setslot{\uc{E}{e}}
5996     \comment{The letter '{E}' .}
5997 \endsetslot
5998
5999 \setslot{\uc{F}{f}}
6000     \comment{The letter '{F}' .}
6001 \endsetslot
6002
6003 \setslot{\uc{G}{g}}
6004     \comment{The letter '{G}' .}
6005 \endsetslot
6006
6007 \setslot{\uc{H}{h}}
6008     \comment{The letter '{H}' .}
6009 \endsetslot
6010
6011 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6012
6013 \setslot{\uc{I}{i}}
6014     \comment{The letter '{I}' .}
6015 \endsetslot
6016
6017 \Fi
6018
6019 \setslot{\uc{J}{j}}
6020     \comment{The letter '{J}' .}
6021 \endsetslot
6022
6023 \setslot{\uc{K}{k}}
6024     \comment{The letter '{K}' .}
```

```
6025 \endsetslot
6026
6027 \setslot{\uc{L}{l}}
6028   \comment{The letter '{L}'.}
6029 \endsetslot
6030
6031 \setslot{\uc{M}{m}}
6032   \comment{The letter '{M}'.}
6033 \endsetslot
6034
6035 \setslot{\uc{N}{n}}
6036   \comment{The letter '{N}'.}
6037 \endsetslot
6038
6039 \setslot{\uc{O}{o}}
6040   \comment{The letter '{O}'.}
6041 \endsetslot
6042
6043 \setslot{\uc{P}{p}}
6044   \comment{The letter '{P}'.}
6045 \endsetslot
6046
6047 \setslot{\uc{Q}{q}}
6048   \comment{The letter '{Q}'.}
6049 \endsetslot
6050
6051 \setslot{\uc{R}{r}}
6052   \comment{The letter '{R}'.}
6053 \endsetslot
6054
6055 \setslot{\uc{S}{s}}
6056   \comment{The letter '{S}'.}
6057 \endsetslot
6058
6059 \setslot{\uc{T}{t}}
6060   \comment{The letter '{T}'.}
6061 \endsetslot
6062
6063 \setslot{\uc{U}{u}}
6064   \comment{The letter '{U}'.}
6065 \endsetslot
6066
6067 \setslot{\uc{V}{v}}
6068   \comment{The letter '{V}'.}
6069 \endsetslot
6070
6071 \setslot{\uc{W}{w}}
6072   \comment{The letter '{W}'.}
6073 \endsetslot
6074
6075 \setslot{\uc{X}{x}}
6076   \comment{The letter '{X}'.}
6077 \endsetslot
6078
```

```

6079 \setslot{\uc{Y}{y}}
6080   \comment{The letter '{Y}'.}
6081 \endsetslot
6082
6083 \setslot{\uc{Z}{z}}
6084   \comment{The letter '{Z}'.}
6085 \endsetslot
6086
6087 \setslot{bracketleft.superior}
6088   \comment{The opening square bracket '['.}
6089 \endsetslot
6090
6091 \setslot{backslash.superior}
6092   \comment{The backwards oblique '\textbackslash'.}
6093 \endsetslot
6094
6095 \setslot{bracketright.superior}
6096   \comment{The closing square bracket ']'.}
6097 \endsetslot
6098
6099 \setslot{asciicircum.superior}
6100   \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
6101     This is included for compatibility with typewriter fonts used
6102     for computer listings.}
6103 \endsetslot
6104
6105 \setslot{underscore.superior}
6106   \comment{The ASCII underline character '\textunderline', usually
6107     set on the baseline.
6108     This is included for compatibility with typewriter fonts used
6109     for computer listings.}
6110 \endsetslot
6111
6112 \setslot{quotyleft.superior}
6113   \ligature[LIG]{quotyleft.superior}{quotedblleft.superior}
6114   \comment{The English opening single quote mark '\textquotyleft\,'.}
6115 \endsetslot
6116
6117 \setslot{\lc{A}{a}}
6118   \comment{The letter '{a}'.}
6119 \endsetslot
6120
6121 \setslot{\lc{B}{b}}
6122   \comment{The letter '{b}'.}
6123 \endsetslot
6124
6125 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6126
6127   \setslot{\lc{C}{c}}
6128   \comment{The letter '{c}'.}
6129 \endsetslot
6130
6131 \Fi
6132

```

```
6133 \setslot{\lc{D}{d}}
6134   \comment{The letter '{d}'.}
6135 \endsetslot
6136
6137 \setslot{\lc{E}{e}}
6138   \comment{The letter '{e}'.}
6139 \endsetslot
6140
6141 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6142
6143   \setslot{\lc{F}{f}}
6144   \ifnumber{\int{ligaturing}}>{0}\then
6145     \ligature{LIG}{\lc{I}{i}}{\lclig{FI}{fi}}
6146     \ligature{LIG}{\lc{F}{f}}{\lclig{FF}{ff}}
6147     \ligature{LIG}{\lc{L}{l}}{\lclig{FL}{fl}}
6148   \Fi
6149   \comment{The letter '{f}'.}
6150 \endsetslot
6151
6152 \Fi
6153
6154 \setslot{\lc{G}{g}}
6155   \comment{The letter '{g}'.}
6156 \endsetslot
6157
6158 \setslot{\lc{H}{h}}
6159   \comment{The letter '{h}'.}
6160 \endsetslot
6161
6162 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6163
6164   \setslot{\lc{I}{i}}
6165   \comment{The letter '{i}'.}
6166 \endsetslot
6167
6168 \Fi
6169
6170 \setslot{\lc{J}{j}}
6171   \comment{The letter '{j}'.}
6172 \endsetslot
6173
6174 \setslot{\lc{K}{k}}
6175   \comment{The letter '{k}'.}
6176 \endsetslot
6177
6178 \setslot{\lc{L}{l}}
6179   \comment{The letter '{l}'.}
6180 \endsetslot
6181
6182 \setslot{\lc{M}{m}}
6183   \comment{The letter '{m}'.}
6184 \endsetslot
6185
6186 \setslot{\lc{N}{n}}
```

```
6187     \comment{The letter '{n}'.}
6188 \endsetslot
6189
6190 \setslot{\lc{0}{o}}
6191     \comment{The letter '{o}'.}
6192 \endsetslot
6193
6194 \setslot{\lc{P}{p}}
6195     \comment{The letter '{p}'.}
6196 \endsetslot
6197
6198 \setslot{\lc{Q}{q}}
6199     \comment{The letter '{q}'.}
6200 \endsetslot
6201
6202 \setslot{\lc{R}{r}}
6203     \comment{The letter '{r}'.}
6204 \endsetslot
6205
6206 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
6207
6208     \setslot{\lc{S}{s}}
6209         \comment{The letter '{s}'.}
6210     \endsetslot
6211
6212 \Fi
6213
6214 \setslot{\lc{T}{t}}
6215     \comment{The letter '{t}'.}
6216 \endsetslot
6217
6218 \setslot{\lc{U}{u}}
6219     \comment{The letter '{u}'.}
6220 \endsetslot
6221
6222 \setslot{\lc{V}{v}}
6223     \comment{The letter '{v}'.}
6224 \endsetslot
6225
6226 \setslot{\lc{W}{w}}
6227     \comment{The letter '{w}'.}
6228 \endsetslot
6229
6230 \setslot{\lc{X}{x}}
6231     \comment{The letter '{x}'.}
6232 \endsetslot
6233
6234 \setslot{\lc{Y}{y}}
6235     \comment{The letter '{y}'.}
6236 \endsetslot
6237
6238 \setslot{\lc{Z}{z}}
6239     \comment{The letter '{z}'.}
6240 \endsetslot
```

```
6241 \setslot{braceleft.superior}
6242   \comment{The opening curly brace '\textbraceleft'.}
6243 \endsetslot
6245
6246 \setslot{bar.superior}
6247   \comment{The ASCII vertical bar '\textbar'.
6248     This is included for compatibility with typewriter fonts used
6249     for computer listings.}
6250 \endsetslot
6251
6252 \setslot{braceright.superior}
6253   \comment{The closing curly brace '\textbraceright'.}
6254 \endsetslot
6255
6256 \setslot{asciitilde.superior}
6257   \comment{The ASCII tilde '\textasciitilde'.
6258     This is included for compatibility with typewriter fonts used
6259     for computer listings.}
6260 \endsetslot
6261
6262 \setslot{hyphenchar.superior}
6263   \comment{The glyph used for hyphenation in this font, which will
6264     almost always be the same as 'hyphen'.}
6265 \endsetslot
6266
6267 \setslot{\uctop{Abreve}{abreve}}
6268   \comment{The letter '\u A'.}
6269 \endsetslot
6270
6271 \setslot{\uc{Aogonek}{aogonek}}
6272   \comment{The letter '\k A'.}
6273 \endsetslot
6274
6275 \setslot{\uctop{Cacute}{cacute}}
6276   \comment{The letter '\ C'.}
6277 \endsetslot
6278
6279 \setslot{\uctop{Ccaron}{ccaron}}
6280   \comment{The letter '\v C'.}
6281 \endsetslot
6282
6283 \setslot{\uctop{Dcaron}{dcaron}}
6284   \comment{The letter '\v D'.}
6285 \endsetslot
6286
6287 \setslot{\uctop{Ecaron}{ecaron}}
6288   \comment{The letter '\v E'.}
6289 \endsetslot
6290
6291 \setslot{\uc{Eogonek}{eogonek}}
6292   \comment{The letter '\k E'.}
6293 \endsetslot
6294
```

```

6295 \setslot{\uctop{Gbreve}{gbreve}}
6296   \comment{The letter '\u00c3'.}
6297 \endsetslot
6298
6299 \setslot{\uctop{Lacute}{lacute}}
6300   \comment{The letter '\u00e1'.}
6301 \endsetslot
6302
6303 \setslot{\uc{Lcaron}{lcaron}}
6304   \comment{The letter '\u0102'.}
6305 \endsetslot
6306
6307 \setslot{\uc{Lslash}{lslash}}
6308   \comment{The letter '\u012c'.}
6309 \endsetslot
6310
6311 \setslot{\uctop{Nacute}{nacute}}
6312   \comment{The letter '\u0103'.}
6313 \endsetslot
6314
6315 \setslot{\uctop{Ncaron}{ncaron}}
6316   \comment{The letter '\u0104'.}
6317 \endsetslot
6318
6319 \setslot{\uc{Eng}{eng}}
6320   \comment{The Sami letter '\u0105'. It is unavailable in \plain\ TeX. This needs
to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.tex in most cases, it
seems.}
6321 \endsetslot
6322
6323 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
6324   \comment{The letter '\u0151'.}
6325 \endsetslot
6326
6327 \setslot{\uctop{Racute}{racute}}
6328   \comment{The letter '\u0107'.}
6329 \endsetslot
6330
6331 \setslot{\uctop{Rcaron}{rcaron}}
6332   \comment{The letter '\u0108'.}
6333 \endsetslot
6334
6335 \setslot{\uctop{Sacute}{sacute}}
6336   \comment{The letter '\u0109'.}
6337 \endsetslot
6338
6339 \setslot{\uctop{Scaron}{scaron}}
6340   \comment{The letter '\u010b'.}
6341 \endsetslot
6342
6343 \setslot{\uc{Scedilla}{scedilla}}
6344   \comment{The letter '\u010c'.}
6345 \endsetslot
6346

```

```

6347 \setslot{\uctop{Tcaron}{tcaron}}
6348   \comment{The letter '\v T'.}
6349 \endsetslot
6350
6351 \setslot{\uc{Tcedilla}{tcedilla}}
6352   \comment{The letter '\c T'.}
6353 \endsetslot
6354
6355 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
6356   \comment{The letter '\H U'.}
6357 \endsetslot
6358
6359 \setslot{\uctop{Uring}{uring}}
6360   \comment{The letter '\r U'.}
6361 \endsetslot
6362
6363 \setslot{\uctop{Ydieresis}{ydieresis}}
6364   \comment{The letter '\Y'.}
6365 \endsetslot
6366
6367 \setslot{\uctop{Zacute}{zacute}}
6368   \comment{The letter '\` Z'.}
6369 \endsetslot
6370
6371 \setslot{\uctop{Zcaron}{zcaron}}
6372   \comment{The letter '\v Z'.}
6373 \endsetslot
6374
6375 \setslot{\uctop{Zdotaccent}{zdotaccent}}
6376   \comment{The letter '\. Z'.}
6377 \endsetslot
6378
6379 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
6380
6381   \setslot{\uclig{IJ}{ij}}
6382     \comment{The letter 'IJ'. This is a single letter, and in a
6383       monowidth font should ideally be one letter wide.}
6384 \endsetslot
6385
6386 \Fi
6387
6388 \setslot{\uctop{Idotaccent}{idotaccent}}
6389   \comment{The letter '\. I'.}
6390 \endsetslot
6391
6392 \setslot{\lc{Dbar}{dbar}}
6393   \comment{The letter '\dj'.}
6394 \endsetslot
6395
6396 \setslot{section.superior}
6397   \comment{The section mark '\textsection'.}
6398 \endsetslot
6399
6400 \setslot{\lctop{Abreve}{abreve}}

```

```

6401     \comment{The letter '\u a'.}
6402 \endsetslot
6403
6404 \setslot{\lc{Aogonek}{aogonek}}
6405     \comment{The letter '\k a'.}
6406 \endsetslot
6407
6408 \setslot{\lctop{Cacute}{cacute}}
6409     \comment{The letter '\c c'.}
6410 \endsetslot
6411
6412 \setslot{\lctop{Ccaron}{ccaron}}
6413     \comment{The letter '\v c'.}
6414 \endsetslot
6415
6416 \setslot{\lctop{Dcaron}{dcaron}}
6417     \comment{The letter '\v d'.}
6418 \endsetslot
6419
6420 \setslot{\lctop{Ecaron}{ecaron}}
6421     \comment{The letter '\v e'.}
6422 \endsetslot
6423
6424 \setslot{\lc{Eogonek}{eogonek}}
6425     \comment{The letter '\k e'.}
6426 \endsetslot
6427
6428 \setslot{\lctop{Gbreve}{gbreve}}
6429     \comment{The letter '\u g'.}
6430 \endsetslot
6431
6432 \setslot{\lctop{Lacute}{lacute}}
6433     \comment{The letter '\l'.}
6434 \endsetslot
6435
6436 \setslot{\lc{Lcaron}{lcaron}}
6437     \comment{The letter '\v l'.}
6438 \endsetslot
6439
6440 \setslot{\lc{Lslash}{lslash}}
6441     \comment{The letter '\l'.}
6442 \endsetslot
6443
6444 \setslot{\lctop{Nacute}{nacute}}
6445     \comment{The letter '\n'.}
6446 \endsetslot
6447
6448 \setslot{\lctop{Ncaron}{ncaron}}
6449     \comment{The letter '\v n'.}
6450 \endsetslot
6451
6452 \setslot{\lc{Eng}{eng}}
6453     \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,

```

```
    it seems.}
6454 \endsetslot
6455
6456 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
6457     \comment{The letter '\H o'.}
6458 \endsetslot
6459
6460 \setslot{\lctop{Racute}{racute}}
6461     \comment{The letter '\r'.}
6462 \endsetslot
6463
6464 \setslot{\lctop{Rcaron}{rcaron}}
6465     \comment{The letter '\v r'.}
6466 \endsetslot
6467
6468 \setslot{\lctop{Sacute}{sacute}}
6469     \comment{The letter '\s'.}
6470 \endsetslot
6471
6472 \setslot{\lctop{Scaron}{scaron}}
6473     \comment{The letter '\v s'.}
6474 \endsetslot
6475
6476 \setslot{\lc{Scedilla}{scedilla}}
6477     \comment{The letter '\c s'.}
6478 \endsetslot
6479
6480 \setslot{\lctop{Tcaron}{tcaron}}
6481     \comment{The letter '\v t'.}
6482 \endsetslot
6483
6484 \setslot{\lc{Tcedilla}{tcedilla}}
6485     \comment{The letter '\c t'.}
6486 \endsetslot
6487
6488 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
6489     \comment{The letter '\H u'.}
6490 \endsetslot
6491
6492 \setslot{\lctop{Uring}{uring}}
6493     \comment{The letter '\r u'.}
6494 \endsetslot
6495
6496 \setslot{\lctop{Ydieresis}{ydieresis}}
6497     \comment{The letter '\y'.}
6498 \endsetslot
6499
6500 \setslot{\lctop{Zacute}{zacute}}
6501     \comment{The letter '\z'.}
6502 \endsetslot
6503
6504 \setslot{\lctop{Zcaron}{zcaron}}
6505     \comment{The letter '\v z'.}
6506 \endsetslot
```

```
6507 \setslot{\lctop{Zdotaccent}{zdotaccent}}
6508   \comment{The letter '\. z'.}
6509 \endsetslot
6510
6511 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
6512
6513 \setslot{\lclig{IJ}{ij}}
6514   \comment{The letter 'ij'. This is a single letter, and in a
6515     monowidth font should ideally be one letter wide.}
6516 \endsetslot
6517
6518 \Fi
6519
6520 \setslot{exclamdown.superior}
6521   \comment{The Spanish punctuation mark '!'.}
6522 \endsetslot
6523
6524 \setslot{questiondown.superior}
6525   \comment{The Spanish punctuation mark '?'.}
6526 \endsetslot
6527
6528 \setslot{sterling.superior}
6529   \comment{The British currency mark '\textsterling'.}
6530 \endsetslot
6531
6532 \setslot{\uctop{Agrave}{agrave}}
6533   \comment{The letter '\` A'.}
6534 \endsetslot
6535
6536 \setslot{\uctop{Aacute}{aacute}}
6537   \comment{The letter '\^ A'.}
6538 \endsetslot
6539
6540 \setslot{\uctop{Acircumflex}{acircumflex}}
6541   \comment{The letter '\~ A'.}
6542 \endsetslot
6543
6544 \setslot{\uctop{Atilde}{atilde}}
6545   \comment{The letter '\~ A'.}
6546 \endsetslot
6547
6548 \setslot{\uctop{Adieresis}{adieresis}}
6549   \comment{The letter '\u00c4 A'.}
6550 \endsetslot
6551
6552 \setslot{\uctop{Aring}{aring}}
6553   \comment{The letter '\r A'.}
6554 \endsetslot
6555
6556 \setslot{\uc{AE}{ae}}
6557   \comment{The letter '\AE'. This is a single letter, and should not be
6558     faked with 'AE'.}
6559 \endsetslot
6560
```

```
6561 \setslot{\uc{Ccedilla}{ccedilla}}
6562   \comment{The letter '\c C'.}
6563 \endsetslot
6565
6566 \setslot{\uctop{Egrave}{egrave}}
6567   \comment{The letter '\` E'.}
6568 \endsetslot
6569
6570 \setslot{\uctop{Eacute}{eacute}}
6571   \comment{The letter '\^ E'.}
6572 \endsetslot
6573
6574 \setslot{\uctop{Ecircumflex}{ecircumflex}}
6575   \comment{The letter '\~ E'.}
6576 \endsetslot
6577
6578 \setslot{\uctop{Edieresis}{edieresis}}
6579   \comment{The letter '\u00f4 E'.}
6580 \endsetslot
6581
6582 \setslot{\uctop{Igrave}{igrave}}
6583   \comment{The letter '\` I'.}
6584 \endsetslot
6585
6586 \setslot{\uctop{Iacute}{iacute}}
6587   \comment{The letter '\^ I'.}
6588 \endsetslot
6589
6590 \setslot{\uctop{Icircumflex}{icircumflex}}
6591   \comment{The letter '\~ I'.}
6592 \endsetslot
6593
6594 \setslot{\uctop{Idieresis}{idieresis}}
6595   \comment{The letter '\u00f4 I'.}
6596 \endsetslot
6597
6598 \setslot{\uc{Eth}{eth}}
6599   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
6600     with a horizontal bar through the stem. It is unavailable
6601     in \plain\ \TeX.}
6602 \endsetslot
6603
6604 \setslot{\uctop{Ntilde}{ntilde}}
6605   \comment{The letter '\~ N'.}
6606 \endsetslot
6607
6608 \setslot{\uctop{Ograve}{ograve}}
6609   \comment{The letter '\` O'.}
6610 \endsetslot
6611
6612 \setslot{\uctop{Oacute}{oacute}}
6613   \comment{The letter '\^ O'.}
6614 \endsetslot
```

```

6615 \setslot{\uctop{0circumflex}{ocircumflex}}
6616   \comment{The letter '\^ O'.}
6617 \endsetslot
6618
6619 \setslot{\uctop{0tilde}{otilde}}
6620   \comment{The letter '\~ O'.}
6621 \endsetslot
6622
6623 \setslot{\uctop{0dieresis}{odieresis}}
6624   \comment{The letter '\" O'.}
6625 \endsetslot
6626
6627 \setslot{\uc{OE}{oe}}
6628   \comment{The letter '\OE'. This is a single letter, and should not be
6629     faked with 'OE'.}
6630 \endsetslot
6631
6632 \setslot{\uc{0slash}{oslash}}
6633   \comment{The letter '\0'.}
6634 \endsetslot
6635
6636 \setslot{\uctop{Ugrave}{ugrave}}
6637   \comment{The letter '\` U'.}
6638 \endsetslot
6639
6640 \setslot{\uctop{Uacute}{uacute}}
6641   \comment{The letter '\' U'.}
6642 \endsetslot
6643
6644 \setslot{\uctop{Ucircumflex}{ucircumflex}}
6645   \comment{The letter '\^ U'.}
6646 \endsetslot
6647
6648 \setslot{\uctop{Udieresis}{udieresis}}
6649   \comment{The letter '\\" U'.}
6650 \endsetslot
6651
6652 \setslot{\uctop{Yacute}{yacute}}
6653   \comment{The letter '\' Y'.}
6654 \endsetslot
6655
6656 \setslot{\uc{Thorn}{thorn}}
6657   \comment{The Icelandic capital letter Thorn, similar to a 'P'
6658     with the bowl moved down. It is unavailable in \plain\ \TeX.}
6659 \endsetslot
6660
6661 \setslot{\uclig{SS}{germandbls}}
6662   \comment{The ligature 'SS', used to give an upper case '\ss'.
6663     In a monowidth font it should be two letters wide.}
6664 \endsetslot
6665
6666 \setslot{\lctop{Agrave}{agrade}}
6667   \comment{The letter '\` a'.}
6668

```

```
6669 \endsetslot
6670
6671 \setslot{\lctop{Aacute}{aacute}}
6672     \comment{The letter '\` a'.}
6673 \endsetslot
6674
6675 \setslot{\lctop{Acircumflex}{acircumflex}}
6676     \comment{The letter '\^ a'.}
6677 \endsetslot
6678
6679 \setslot{\lctop{Atilde}{atilde}}
6680     \comment{The letter '\~ a'.}
6681 \endsetslot
6682
6683 \setslot{\lctop{Adieresis}{adieresis}}
6684     \comment{The letter '\" a'.}
6685 \endsetslot
6686
6687 \setslot{\lctop{Aring}{aring}}
6688     \comment{The letter '\r a'.}
6689 \endsetslot
6690
6691 \setslot{\lc{AE}{ae}}
6692     \comment{The letter '\ae'. This is a single letter, and should not be
6693         faked with 'ae'.}
6694 \endsetslot
6695
6696 \setslot{\lc{Ccedilla}{ccedilla}}
6697     \comment{The letter '\c c'.}
6698 \endsetslot
6699
6700 \setslot{\lctop{Egrave}{egrave}}
6701     \comment{The letter '\` e'.}
6702 \endsetslot
6703
6704 \setslot{\lctop{Eacute}{eacute}}
6705     \comment{The letter '\` e'.}
6706 \endsetslot
6707
6708 \setslot{\lctop{Ecircumflex}{ecircumflex}}
6709     \comment{The letter '\^ e'.}
6710 \endsetslot
6711
6712 \setslot{\lctop{Edieresis}{edieresis}}
6713     \comment{The letter '\\" e'.}
6714 \endsetslot
6715
6716 \setslot{\lctop{Igrave}{igrave}}
6717     \comment{The letter '\` i'.}
6718 \endsetslot
6719
6720 \setslot{\lctop{Iacute}{iacute}}
6721     \comment{The letter '\` i'.}
6722 \endsetslot
```

```
6723 \setslot{\lctop{Icircumflex}{icircumflex}}
6724   \comment{The letter '\^i'.}
6725 \endsetslot
6727
6728 \setslot{\lctop{Idieresis}{idieresis}}
6729   \comment{The letter '\"i'.}
6730 \endsetslot
6731
6732 \setslot{\lc{Eth}{eth}}
6733   \comment{The Icelandic lowercase letter 'eth' similar to
6734     a '$\partial$' with an oblique bar through the stem.
6735     It is unavailable in \plain\ TeX.}
6736 \endsetslot
6737
6738 \setslot{\lctop{Ntilde}{ntilde}}
6739   \comment{The letter '\~n'.}
6740 \endsetslot
6741
6742 \setslot{\lctop{Ograve}{ograve}}
6743   \comment{The letter '\`o'.}
6744 \endsetslot
6745
6746 \setslot{\lctop{Oacute}{oacute}}
6747   \comment{The letter '\o'.}
6748 \endsetslot
6749
6750 \setslot{\lctop{Ocircumflex}{ocircumflex}}
6751   \comment{The letter '\^o'.}
6752 \endsetslot
6753
6754 \setslot{\lctop{Otilde}{otilde}}
6755   \comment{The letter '\~o'.}
6756 \endsetslot
6757
6758 \setslot{\lctop{Odieresis}{odieresis}}
6759   \comment{The letter '\"o'.}
6760 \endsetslot
6761
6762 \setslot{\lc{OE}{oe}}
6763   \comment{The letter '\oe'. This is a single letter, and should not be
6764     faked with 'oe'.}
6765 \endsetslot
6766
6767 \setslot{\lc{Oslash}{oslash}}
6768   \comment{The letter '\o'.}
6769 \endsetslot
6770
6771 \setslot{\lctop{Ugrave}{ugrave}}
6772   \comment{The letter '\`u'.}
6773 \endsetslot
6774
6775 \setslot{\lctop{Uacute}{uacute}}
6776   \comment{The letter '\o'.}
```

```

6777 \endsetslot
6778
6779 \setslot{\lctop{Ucircumflex}{ucircumflex}}
6780   \comment{The letter '\^ u'.}
6781 \endsetslot
6782
6783 \setslot{\lctop{Udieresis}{udieresis}}
6784   \comment{The letter '\u0304 u'.}
6785 \endsetslot
6786
6787 \setslot{\lctop{Yacute}{yacute}}
6788   \comment{The letter '\` y'.}
6789 \endsetslot
6790
6791 \setslot{\lc{Thorn}{thorn}}
6792   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
6793       with an ascender rising from the stem. It is unavailable
6794       in \plain\ \TeX.}
6795 \endsetslot
6796
6797 \setslot{\lc{SS}{germandbls}}
6798   \comment{The letter '\ss'.}
6799 \endsetslot
6800
6801 \endencoding

```

#### 4.3.11 t1-dotsuperior.etx

t1-dotsuperior.etx (*etx*)

```

6802 %%
6803 %% - The original notices at the top of that file concerning authors,
6804 %% maintenance etc. are replaced by this notice.
6805 %% - The file is renamed.
6806 %% - The encoding name is modified.
6807 %% - The file is modified to accommodate differences in glyph names.
6808 %% - The file is modified for use in encoding superiors.
6809 %%
6810 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
6811 \relax
6812 \encoding
6813
6814 \needsfontinstversion{1.910}
6815
6816 \setcommand\lc#1#2{\#2.superior}
6817 \setcommand\uc#1#2{\#1.superior}
6818 \setcommand\lctop#1#2{\#2.superior}
6819 \setcommand\uctop#1#2{\#1.superior}
6820 \setcommand\lclig#1#2{\#2.superior}
6821 \ifisint{letterspacing}\then
6822   \ifnumber{\int{letterspacing}}={0}\then \Else
6823     \setcommand\uclig#1#2{\#1spaced}
6824   \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1spaced|, but

```

```

6825      you can't see it as \verb|\setcommand| commands are invisible in
6826      the typeset output.}
6827      \Fi
6828      \Fi
6829      \setcommand\uclig#1#2{\#1.superior}
6830      \setcommand\digit#1{\#1.superior}
6831
6832      \ifisint{monowidth}\then
6833          \setint{ligaturing}{0}
6834      \Else
6835          % The following empty line is *important* to get the formatting
6836          % right here (sigh)! (Remember that it is a \par token.)
6837
6838      \ifisint{letterspacing}\then
6839          \ifnumber{\int{letterspacing}}={0}\then \Else
6840              \setint{ligaturing}{0}
6841          \Fi
6842          \Fi
6843      \setint{ligaturing}{1}
6844      \Fi
6845
6846      \setint{italicslant}{0}
6847      \setint{quad}{1000}
6848      \setint{baselineskip}{1200}
6849
6850      \ifisglyph{x}\then
6851          \setint{xheight}{\height{x}}
6852      \Else
6853          \setint{xheight}{500}
6854      \Fi
6855
6856      \ifisglyph{space}\then
6857          \setint{interword}{\width{space}}
6858      \Else\ifisglyph{i}\then
6859          \setint{interword}{\width{i}}
6860      \Else
6861          \setint{interword}{333}
6862      \Fi\Fi
6863
6864      \ifisint{monowidth}\then
6865          \setint{stretchword}{0}
6866          \setint{shrinkword}{0}
6867          \setint{extraspace}{\int{interword}}
6868      \Else
6869          \setint{stretchword}{\scale{\int{interword}}{600}}
6870          \setint{shrinkword}{\scale{\int{interword}}{240}}
6871          \setint{extraspace}{\scale{\int{interword}}{240}}
6872      \Fi
6873
6874      \ifisglyph{X}\then
6875          \setint{capheight}{\height{X}}
6876      \Else
6877          \setint{capheight}{750}
6878      \Fi

```

```

6879 \ifisglyph{d}\then
6880   \setint{ascender}{\height{d}}
6881 \Else\ifisint{capheight}\then
6882   \setint{ascender}{\int{capheight}}
6883 \Else
6884   \setint{ascender}{750}
6885 \Fi\Fi
6887
6888 \ifisglyph{Aring}\then
6889   \setint{acccapheight}{\height{Aring}}
6890 \Else
6891   \setint{acccapheight}{999}
6892 \Fi
6893
6894 \ifisint{descender_neg}\then
6895   \setint{descender}{\neg{\int{descender_neg}}}
6896 \Else\ifisglyph{p}\then
6897   \setint{descender}{\depth{p}}
6898 \Else
6899   \setint{descender}{250}
6900 \Fi\Fi
6901
6902 \ifisglyph{Aring}\then
6903   \setint{maxheight}{\height{Aring}}
6904 \Else
6905   \setint{maxheight}{1000}
6906 \Fi
6907
6908 \ifisint{maxdepth_neg}\then
6909   \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
6910 \Else\ifisglyph{j}\then
6911   \setint{maxdepth}{\depth{j}}
6912 \Else
6913   \setint{maxdepth}{250}
6914 \Fi\Fi
6915
6916 \ifisglyph{six}\then
6917   \setint{digitwidth}{\width{six}}
6918 \Else
6919   \setint{digitwidth}{500}
6920 \Fi
6921
6922 \setint{capstem}{0} % not in AFM files
6923
6924 \setfontdimen{1}{italicslant}      % italic slant
6925 \setfontdimen{2}{interword}        % interword space
6926 \setfontdimen{3}{stretchword}      % interword stretch
6927 \setfontdimen{4}{shrinkword}       % interword shrink
6928 \setfontdimen{5}{xheight}         % x-height
6929 \setfontdimen{6}{quad}             % quad
6930 \setfontdimen{7}{extraspace}       % extra space after .
6931 \setfontdimen{8}{capheight}        % cap height
6932 \setfontdimen{9}{ascender}         % ascender

```

```

6933 \setfontdimen{10}{accapheight} % accented cap height
6934 \setfontdimen{11}{descender} % descender's depth
6935 \setfontdimen{12}{maxheight} % max height
6936 \setfontdimen{13}{maxdepth} % max depth
6937 \setfontdimen{14}{digitwidth} % digit width
6938 \setfontdimen{15}{verticalstem} % dominant width of vertical stems
6939 \setfontdimen{16}{baselineskip} % baselineskip
6940
6941 \ifnumber{\int{ligaturing}}<0\then
6942   \comment{In this case, the codingscheme can be different from the
6943   default, and therefore we refrain from setting it.}
6944 \Else
6945   \setstr{codingscheme}{EXTENDED TEX FONT ENCODING - DOTSUPERIOR}
6946 \Fi
6947
6948 \setslot{\lc{Grave}{grave}}
6949   \comment{The grave accent '\{}.'}
6950 \endsetslot
6951
6952 \setslot{\lc{Acute}{acute}}
6953   \comment{The acute accent '\{}.'}
6954 \endsetslot
6955
6956 \setslot{\lc{Circumflex}{circumflex}}
6957   \comment{The circumflex accent '\^{}.'}
6958 \endsetslot
6959
6960 \setslot{\lc{Tilde}{tilde}}
6961   \comment{The tilde accent '\~{}.'}
6962 \endsetslot
6963
6964 \setslot{\lc{Dieresis}{dieresis}}
6965   \comment{The umlaut or dieresis accent '\\"{}.'}
6966 \endsetslot
6967
6968 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
6969   \comment{The long Hungarian umlaut '\H{}.'}
6970 \endsetslot
6971
6972 \setslot{\lc{Ring}{ring}}
6973   \comment{The ring accent '\r{}.'}
6974 \endsetslot
6975
6976 \setslot{\lc{Caron}{caron}}
6977   \comment{The caron or h'akov cek accent '\v{}.'}
6978 \endsetslot
6979
6980 \setslot{\lc{Breve}{breve}}
6981   \comment{The breve accent '\u{}.'}
6982 \endsetslot
6983
6984 \setslot{\lc{Macron}{macron}}
6985   \comment{The macron accent '\={}.'}
6986 \endsetslot

```

```

6987 \setslot{\lc{Dotaccent}{dotaccent}}
6988   \comment{The dot accent '\.{ }'.}
6989 \endsetslot
6990
6991 \setslot{\lc{Cedilla}{cedilla}}
6992   \comment{The cedilla accent '\c { }'.}
6993 \endsetslot
6994
6995 \setslot{\lc{Ogonek}{ogonek}}
6996   \comment{The ogonek accent '\k { }'.}
6997 \endsetslot
6998
6999 \setslot{quotesinglbase.superior}
7000   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
7001       but with different sidebearings.}
7002 \endsetslot
7003
7004 \setslot{guilsinglleft.superior}
7005   \comment{A French single opening quote mark '\guilsinglleft',
7006       unavailable in \plain\ \TeX.}
7007 \endsetslot
7008
7009 \setslot{guilsinglright.superior}
7010   \comment{A French single closing quote mark '\guilsinglright',
7011       unavailable in \plain\ \TeX.}
7012 \endsetslot
7013
7014 \setslot{quotedblleft.superior}
7015   \comment{The English opening quote mark '\,\textquotedblleft\,'.}
7016 \endsetslot
7017
7018 \setslot{quotedblright.superior}
7019   \comment{The English closing quote mark '\,\textquotedblright\,'.}
7020 \endsetslot
7021
7022 \setslot{quotedblbase.superior}
7023   \comment{A German double quote mark '\quotedblbase' similar to two commas,
7024       but with tighter letterspacing and different sidebearings.}
7025 \endsetslot
7026
7027 \setslot{guillemotleft.superior}
7028   \comment{A French double opening quote mark '\guillemotleft',
7029       unavailable in \plain\ \TeX.}
7030 \endsetslot
7031
7032 \setslot{guillemotright.superior}
7033   \comment{A French closing opening quote mark '\guillemotright',
7034       unavailable in \plain\ \TeX.}
7035 \endsetslot
7036
7037 \setslot{endash.superior}
7038   \ligature{LIG}{hyphen.superior}{emdash.superior}
7039   \comment{The number range dash '1--9'.
7040 }
```

```

7041      This is called ‘rangedash’ by fontinst’s t1.etx, but it needs to be
7042      called ‘endash’ to work right.
7043      The ‘\textendash’. In a monowidth font, this might be set as
7044      ‘\texttt{1{-}9}’.
7045  \endsetslot
7046
7047  \setslot{emdash.superior}
7048      \comment{The punctuation dash ‘Oh---boy.’
7049      This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be called
7050      ‘emdash’ to work right.
7051      The ‘\textemdash’. In a monowidth font, this might be set as
7052      ‘\texttt{Oh{-}{-}boy.}’}
7053  \endsetslot
7054
7055  \setslot{compwordmark.superior}
7056      \comment{An invisible glyph, with zero width and depth, but the
7057      height of lowercase letters without ascenders.
7058      It is used to stop ligaturing in words like ‘shelf{}ful’.}
7059  \endsetslot
7060
7061  \setslot{perthousandzero.superior}
7062      \comment{A glyph which is placed after ‘\%’ to produce a
7063      ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
7064      Your guess is as good as mine as to what this glyph should look
7065      like in a monowidth font.}
7066  \endsetslot
7067
7068  \setslot{\lc{dotlessI}{dotlessi}}
7069      \comment{A dotless i ‘\i’, used to produce accented letters such as
7070      ‘\=i’.}
7071  \endsetslot
7072
7073  \setslot{\lc{dotlessJ}{dotlessj}}
7074      \comment{A dotless j ‘\j’, used to produce accented letters such as
7075      ‘\=j’. Most non-\TeX\ fonts do not have this glyph.}
7076  \endsetslot
7077
7078  \ifnumber{\int{ligaturing}}<{0}\then \skipslots{5}\Else
7079
7080  \setslot{\lc{lig{FF}{ff}}}
7081      \ifnumber{\int{ligaturing}}>{0}\then
7082          \ligature{LIG}{\lc{I}{i}}{\lc{lig{FFI}{ffi}}}
7083          \ligature{LIG}{\lc{L}{l}}{\lc{lig{FFL}{ffl}}}
7084          \Fi
7085          \comment{The ‘ff’ ligature. It should be two characters wide in a
7086          monowidth font.}
7087  \endsetslot
7088
7089  \setslot{\lc{lig{FI}{fi}}}
7090      \comment{The ‘fi’ ligature. It should be two characters wide in a
7091      monowidth font.}
7092  \endsetslot
7093
7094  \setslot{\lc{lig{FL}{fl}}}

```

```
7095     \comment{The 'fl' ligature. It should be two characters wide in a
7096         monowidth font.}
7097 \endsetslot
7098
7099 \setslot{\lclig{FFI}{ffi}}
7100     \comment{The 'ffi' ligature. It should be three characters wide in a
7101         monowidth font.}
7102 \endsetslot
7103
7104 \setslot{\lclig{FFL}{ffl}}
7105     \comment{The 'ffl' ligature. It should be three characters wide in a
7106         monowidth font.}
7107 \endsetslot
7108
7109 \Fi
7110
7111 \setslot{visiblespace.superior}
7112     \comment{A visible space glyph '\textvisiblespace'.}
7113 \endsetslot
7114
7115 \setslot{exclam.superior}
7116     \ligature{LIG}{quotelleft.superior}{exclamdown.superior}
7117     \comment{The exclamation mark '!'.}
7118 \endsetslot
7119
7120 \setslot{quotedbl.superior}
7121     \comment{The 'neutral' double quotation mark '\textquotedbl',,
7122         included for use in monowidth fonts, or for setting computer
7123         programs. Note that the inclusion of this glyph in this slot
7124         means that \TeX documents which used '{\tt\char"} as an
7125         input character will no longer work.}
7126 \endsetslot
7127
7128 \setslot{numbersign.superior}
7129     \comment{The hash sign '#'.}
7130 \endsetslot
7131
7132 \setslot{dollar.superior}
7133     \comment{The dollar sign '$'.}
7134 \endsetslot
7135
7136 \setslot{percent.superior}
7137     \comment{The percent sign '%'.}
7138 \endsetslot
7139
7140 \setslot{ampersand.superior}
7141     \comment{The ampersand sign '&'.}
7142 \endsetslot
7143
7144 \setslot{quoteright.superior}
7145     \ligature{LIG}{quoteright.superior}{quotedblrigh.superior}
7146     \comment{The English closing single quote mark '\textquoteright,'.}
7147 \endsetslot
7148
```

```

7149 \setslot{parenleft.superior}
7150   \comment{The opening parenthesis '('.}
7151 \endsetslot
7152
7153 \setslot{parenright.superior}
7154   \comment{The closing parenthesis ')'.}
7155 \endsetslot
7156
7157 \setslot{asterisk.superior}
7158   \comment{The raised asterisk '*' .}
7159 \endsetslot
7160
7161 \setslot{plus.superior}
7162   \comment{The addition sign '+' .}
7163 \endsetslot
7164
7165 \setslot{comma.superior}
7166   \ligature[LIG]{comma.superior}{quotedblbase.superior}
7167   \comment{The comma ',' .}
7168 \endsetslot
7169
7170 \setslot{hyphen.superior}
7171   \ligature[LIG]{hyphen.superior}{endash.superior}
7172   \ligature[LIG]{hyphenchar.superior}{hyphenchar.superior}
7173   \comment{The hyphen '-' .}
7174 \endsetslot
7175
7176 \setslot{period.superior}
7177   \comment{The period '.' .}
7178 \endsetslot
7179
7180 \setslot{slash.superior}
7181   \comment{The forward oblique '/'.}
7182 \endsetslot
7183
7184 \setslot{\digit{zero}}
7185   \comment{The number '0'. This (and all the other numerals) may be
7186     old style or ranging digits.}
7187 \endsetslot
7188
7189 \setslot{\digit{one}}
7190   \comment{The number '1' .}
7191 \endsetslot
7192
7193 \setslot{\digit{two}}
7194   \comment{The number '2' .}
7195 \endsetslot
7196
7197 \setslot{\digit{three}}
7198   \comment{The number '3' .}
7199 \endsetslot
7200
7201 \setslot{\digit{four}}
7202   \comment{The number '4' .}

```

```

7203 \endsetslot
7204
7205 \setslot{\digit{five}}
7206   \comment{The number '5'.}
7207 \endsetslot
7208
7209 \setslot{\digit{six}}
7210   \comment{The number '6'.}
7211 \endsetslot
7212
7213 \setslot{\digit{seven}}
7214   \comment{The number '7'.}
7215 \endsetslot
7216
7217 \setslot{\digit{eight}}
7218   \comment{The number '8'.}
7219 \endsetslot
7220
7221 \setslot{\digit{nine}}
7222   \comment{The number '9'.}
7223 \endsetslot
7224
7225 \setslot{colon.superior}
7226   \comment{The colon punctuation mark ':' .}
7227 \endsetslot
7228
7229 \setslot{semicolon.superior}
7230   \comment{The semi-colon punctuation mark ';' .}
7231 \endsetslot
7232
7233 \setslot{less.superior}
7234   \ligature[LIG]{less.superior}{guillemotleft.superior}
7235   \comment{The less-than sign '\textless' .}
7236 \endsetslot
7237
7238 \setslot{equal.superior}
7239   \comment{The equals sign '=' .}
7240 \endsetslot
7241
7242 \setslot{greater.superior}
7243   \ligature[LIG]{greater.superior}{guillemotright.superior}
7244   \comment{The greater-than sign '\textgreater' .}
7245 \endsetslot
7246
7247 \setslot{question.superior}
7248   \ligature[LIG]{quoteleft.superior}{questiondown.superior}
7249   \comment{The question mark '?' .}
7250 \endsetslot
7251
7252 \setslot{at.superior}
7253   \comment{The at sign '@' .}
7254 \endsetslot
7255
7256 \setslot{\uc{A}{a}}

```

```
7257     \comment{The letter '{A}'.}
7258 \endsetslot
7259
7260 \setslot{\uc{B}{b}}
7261     \comment{The letter '{B}'.}
7262 \endsetslot
7263
7264 \setslot{\uc{C}{c}}
7265     \comment{The letter '{C}'.}
7266 \endsetslot
7267
7268 \setslot{\uc{D}{d}}
7269     \comment{The letter '{D}'.}
7270 \endsetslot
7271
7272 \setslot{\uc{E}{e}}
7273     \comment{The letter '{E}'.}
7274 \endsetslot
7275
7276 \setslot{\uc{F}{f}}
7277     \comment{The letter '{F}'.}
7278 \endsetslot
7279
7280 \setslot{\uc{G}{g}}
7281     \comment{The letter '{G}'.}
7282 \endsetslot
7283
7284 \setslot{\uc{H}{h}}
7285     \comment{The letter '{H}'.}
7286 \endsetslot
7287
7288 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
7289
7290 \setslot{\uc{I}{i}}
7291     \comment{The letter '{I}'.}
7292 \endsetslot
7293
7294 \Fi
7295
7296 \setslot{\uc{J}{j}}
7297     \comment{The letter '{J}'.}
7298 \endsetslot
7299
7300 \setslot{\uc{K}{k}}
7301     \comment{The letter '{K}'.}
7302 \endsetslot
7303
7304 \setslot{\uc{L}{l}}
7305     \comment{The letter '{L}'.}
7306 \endsetslot
7307
7308 \setslot{\uc{M}{m}}
7309     \comment{The letter '{M}'.}
7310 \endsetslot
```

```
7311 \setslot{\uc{N}{n}}
7312   \comment{The letter '{N}'.}
7313 \endsetslot
7315
7316 \setslot{\uc{O}{o}}
7317   \comment{The letter '{O}'.}
7318 \endsetslot
7319
7320 \setslot{\uc{P}{p}}
7321   \comment{The letter '{P}'.}
7322 \endsetslot
7323
7324 \setslot{\uc{Q}{q}}
7325   \comment{The letter '{Q}'.}
7326 \endsetslot
7327
7328 \setslot{\uc{R}{r}}
7329   \comment{The letter '{R}'.}
7330 \endsetslot
7331
7332 \setslot{\uc{S}{s}}
7333   \comment{The letter '{S}'.}
7334 \endsetslot
7335
7336 \setslot{\uc{T}{t}}
7337   \comment{The letter '{T}'.}
7338 \endsetslot
7339
7340 \setslot{\uc{U}{u}}
7341   \comment{The letter '{U}'.}
7342 \endsetslot
7343
7344 \setslot{\uc{V}{v}}
7345   \comment{The letter '{V}'.}
7346 \endsetslot
7347
7348 \setslot{\uc{W}{w}}
7349   \comment{The letter '{W}'.}
7350 \endsetslot
7351
7352 \setslot{\uc{X}{x}}
7353   \comment{The letter '{X}'.}
7354 \endsetslot
7355
7356 \setslot{\uc{Y}{y}}
7357   \comment{The letter '{Y}'.}
7358 \endsetslot
7359
7360 \setslot{\uc{Z}{z}}
7361   \comment{The letter '{Z}'.}
7362 \endsetslot
7363
7364 \setslot{bracketleft.superior}
```

```

7365     \comment{The opening square bracket '['.}
7366     \endsetslot
7367
7368 \setslot{backslash.superior}
7369     \comment{The backwards oblique '\textbackslash'.}
7370 \endsetslot
7371
7372 \setslot{bracketright.superior}
7373     \comment{The closing square bracket ']' .}
7374 \endsetslot
7375
7376 \setslot{asciicircum.superior}
7377     \comment{The ASCII upward-pointing arrow head '\textasciicircum'.
7378     This is included for compatibility with typewriter fonts used
7379     for computer listings.}
7380 \endsetslot
7381
7382 \setslot{underscore.superior}
7383     \comment{The ASCII underline character '\textunderline', usually
7384     set on the baseline.
7385     This is included for compatibility with typewriter fonts used
7386     for computer listings.}
7387 \endsetslot
7388
7389 \setslot{quotyleft.superior}
7390     \ligature{LIG}{quotyleft.superior}{quotedblleft.superior}
7391     \comment{The English opening single quote mark '\textquotyleft\,'.}
7392 \endsetslot
7393
7394 \setslot{\lc{A}{a}}
7395     \comment{The letter '{a}' .}
7396 \endsetslot
7397
7398 \setslot{\lc{B}{b}}
7399     \comment{The letter '{b}' .}
7400 \endsetslot
7401
7402 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
7403
7404     \setslot{\lc{C}{c}}
7405     \comment{The letter '{c}' .}
7406 \endsetslot
7407
7408 \Fi
7409
7410 \setslot{\lc{D}{d}}
7411     \comment{The letter '{d}' .}
7412 \endsetslot
7413
7414 \setslot{\lc{E}{e}}
7415     \comment{The letter '{e}' .}
7416 \endsetslot
7417
7418 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else

```

```

7419   \setslot{\lc{F}{f}}
7420     \ifnumber{\int{ligaturing}}>{0}\then
7421       \ligature{LIG}{\lc{I}{i}}{\lc{I}{f}}
7422       \ligature{LIG}{\lc{F}{f}}{\lc{F}{ff}}
7423       \ligature{LIG}{\lc{L}{l}}{\lc{L}{fl}}
7424     \Fi
7425     \comment{The letter '{f}'.}
7426   \endsetslot
7428
7429 \Fi
7430
7431 \setslot{\lc{G}{g}}
7432   \comment{The letter '{g}'.}
7433 \endsetslot
7434
7435 \setslot{\lc{H}{h}}
7436   \comment{The letter '{h}'.}
7437 \endsetslot
7438
7439 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
7440
7441   \setslot{\lc{I}{i}}
7442     \comment{The letter '{i}'.}
7443   \endsetslot
7444
7445 \Fi
7446
7447 \setslot{\lc{J}{j}}
7448   \comment{The letter '{j}'.}
7449 \endsetslot
7450
7451 \setslot{\lc{K}{k}}
7452   \comment{The letter '{k}'.}
7453 \endsetslot
7454
7455 \setslot{\lc{L}{l}}
7456   \comment{The letter '{l}'.}
7457 \endsetslot
7458
7459 \setslot{\lc{M}{m}}
7460   \comment{The letter '{m}'.}
7461 \endsetslot
7462
7463 \setslot{\lc{N}{n}}
7464   \comment{The letter '{n}'.}
7465 \endsetslot
7466
7467 \setslot{\lc{O}{o}}
7468   \comment{The letter '{o}'.}
7469 \endsetslot
7470
7471 \setslot{\lc{P}{p}}
7472   \comment{The letter '{p}'.}

```

```

7473 \endsetslot
7474
7475 \setslot{\lc{Q}{q}}
7476   \comment{The letter '{q}'.}
7477 \endsetslot
7478
7479 \setslot{\lc{R}{r}}
7480   \comment{The letter '{r}'.}
7481 \endsetslot
7482
7483 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
7484
7485   \setslot{\lc{S}{s}}
7486     \comment{The letter '{s}'.}
7487 \endsetslot
7488
7489 \Fi
7490
7491 \setslot{\lc{T}{t}}
7492   \comment{The letter '{t}'.}
7493 \endsetslot
7494
7495 \setslot{\lc{U}{u}}
7496   \comment{The letter '{u}'.}
7497 \endsetslot
7498
7499 \setslot{\lc{V}{v}}
7500   \comment{The letter '{v}'.}
7501 \endsetslot
7502
7503 \setslot{\lc{W}{w}}
7504   \comment{The letter '{w}'.}
7505 \endsetslot
7506
7507 \setslot{\lc{X}{x}}
7508   \comment{The letter '{x}'.}
7509 \endsetslot
7510
7511 \setslot{\lc{Y}{y}}
7512   \comment{The letter '{y}'.}
7513 \endsetslot
7514
7515 \setslot{\lc{Z}{z}}
7516   \comment{The letter '{z}'.}
7517 \endsetslot
7518
7519 \setslot{braceleft.superior}
7520   \comment{The opening curly brace '\textbraceleft'.}
7521 \endsetslot
7522
7523 \setslot{bar.superior}
7524   \comment{The ASCII vertical bar '\textbar'.
7525     This is included for compatibility with typewriter fonts used
7526     for computer listings.}

```

```
7527 \endsetslot
7528
7529 \setslot{braceright.superior}
7530     \comment{The closing curly brace ‘\textbraceright’.}
7531 \endsetslot
7532
7533 \setslot{asciitilde.superior}
7534     \comment{The ASCII tilde ‘\textasciitilde’.
7535         This is included for compatibility with typewriter fonts used
7536         for computer listings.}
7537 \endsetslot
7538
7539 \setslot{hyphenchar.superior}
7540     \comment{The glyph used for hyphenation in this font, which will
7541         almost always be the same as ‘hyphen’.}
7542 \endsetslot
7543
7544 \setslot{\uctop{Abreve}{abreve}}
7545     \comment{The letter ‘\u A’.}
7546 \endsetslot
7547
7548 \setslot{\uc{Aogonek}{aogonek}}
7549     \comment{The letter ‘\k A’.}
7550 \endsetslot
7551
7552 \setslot{\uctop{Cacute}{cacute}}
7553     \comment{The letter ‘\` C’.}
7554 \endsetslot
7555
7556 \setslot{\uctop{Ccaron}{ccaron}}
7557     \comment{The letter ‘\v C’.}
7558 \endsetslot
7559
7560 \setslot{\uctop{Dcaron}{dcaron}}
7561     \comment{The letter ‘\v D’.}
7562 \endsetslot
7563
7564 \setslot{\uctop{Ecaron}{ecaron}}
7565     \comment{The letter ‘\v E’.}
7566 \endsetslot
7567
7568 \setslot{\uc{Eogonek}{eogonek}}
7569     \comment{The letter ‘\k E’.}
7570 \endsetslot
7571
7572 \setslot{\uctop{Gbreve}{gbreve}}
7573     \comment{The letter ‘\u G’.}
7574 \endsetslot
7575
7576 \setslot{\uctop{Lacute}{lacute}}
7577     \comment{The letter ‘\` L’.}
7578 \endsetslot
7579
7580 \setslot{\uc{Lcaron}{lcaron}}
```

```

7581     \comment{The letter '\v L'.}
7582 \endsetslot
7583
7584 \setslot{\uc{Lslash}{lslash}}
7585     \comment{The letter '\L'.}
7586 \endsetslot
7587
7588 \setslot{\uctop{Nacute}{nacute}}
7589     \comment{The letter '\ N'.}
7590 \endsetslot
7591
7592 \setslot{\uctop{Ncaron}{ncaron}}
7593     \comment{The letter '\v N'.}
7594 \endsetslot
7595
7596 \setslot{\uc{Eng}{eng}}
7597     \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
    to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
    seems.}
7598 \endsetslot
7599
7600 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
7601     \comment{The letter '\H O'.}
7602 \endsetslot
7603
7604 \setslot{\uctop{Racute}{racute}}
7605     \comment{The letter '\ R'.}
7606 \endsetslot
7607
7608 \setslot{\uctop{Rcaron}{rcaron}}
7609     \comment{The letter '\v R'.}
7610 \endsetslot
7611
7612 \setslot{\uctop{Sacute}{sacute}}
7613     \comment{The letter '\ S'.}
7614 \endsetslot
7615
7616 \setslot{\uctop{Scaron}{scaron}}
7617     \comment{The letter '\v S'.}
7618 \endsetslot
7619
7620 \setslot{\uc{Scedilla}{scedilla}}
7621     \comment{The letter '\c S'.}
7622 \endsetslot
7623
7624 \setslot{\uctop{Tcaron}{tcaron}}
7625     \comment{The letter '\v T'.}
7626 \endsetslot
7627
7628 \setslot{\uc{Tcedilla}{tcedilla}}
7629     \comment{The letter '\c T'.}
7630 \endsetslot
7631
7632 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}

```

```

7633     \comment{The letter '\H U'.}
7634     \endsetslot
7635
7636 \setslot{\uctop{Uring}{uring}}
7637     \comment{The letter '\r U'.}
7638 \endsetslot
7639
7640 \setslot{\uctop{Ydieresis}{ydieresis}}
7641     \comment{The letter '\Y' .}
7642 \endsetslot
7643
7644 \setslot{\uctop{Zacute}{zacute}}
7645     \comment{The letter '\Z' .}
7646 \endsetslot
7647
7648 \setslot{\uctop{Zcaron}{zcaron}}
7649     \comment{The letter '\v Z' .}
7650 \endsetslot
7651
7652 \setslot{\uctop{Zdotaccent}{zdotaccent}}
7653     \comment{The letter '\. Z' .}
7654 \endsetslot
7655
7656 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
7657
7658     \setslot{\uclig{IJ}{ij}}
7659         \comment{The letter 'IJ'. This is a single letter, and in a
7660             monowidth font should ideally be one letter wide.}
7661 \endsetslot
7662
7663 \Fi
7664
7665 \setslot{\uctop{Idotaccent}{idotaccent}}
7666     \comment{The letter '\. I' .}
7667 \endsetslot
7668
7669 \setslot{\lc{Dbar}{dbar}}
7670     \comment{The letter '\dj' .}
7671 \endsetslot
7672
7673 \setslot{section.superior}
7674     \comment{The section mark '\textsection' .}
7675 \endsetslot
7676
7677 \setslot{\lctop{Abreve}{abreve}}
7678     \comment{The letter '\u a' .}
7679 \endsetslot
7680
7681 \setslot{\lc{Aogonek}{aogonek}}
7682     \comment{The letter '\k a' .}
7683 \endsetslot
7684
7685 \setslot{\lctop{Cacute}{cacute}}
7686     \comment{The letter '\c c' .}

```

```

7687 \endsetslot
7688
7689 \setslot{\lctop{Ccaron}{ccaron}}
7690   \comment{The letter '\v c'.}
7691 \endsetslot
7692
7693 \setslot{\lctop{Dcaron}{dcaron}}
7694   \comment{The letter '\v d'.}
7695 \endsetslot
7696
7697 \setslot{\lctop{Ecaron}{ecaron}}
7698   \comment{The letter '\v e'.}
7699 \endsetslot
7700
7701 \setslot{\lc{Eogonek}{eogonek}}
7702   \comment{The letter '\k e'.}
7703 \endsetslot
7704
7705 \setslot{\lctop{Gbreve}{gbreve}}
7706   \comment{The letter '\u g'.}
7707 \endsetslot
7708
7709 \setslot{\lctop{Lacute}{lacute}}
7710   \comment{The letter '\` l'.}
7711 \endsetslot
7712
7713 \setslot{\lc{Lcaron}{lcaron}}
7714   \comment{The letter '\v l'.}
7715 \endsetslot
7716
7717 \setslot{\lc{Lslash}{lslash}}
7718   \comment{The letter '\l'.}
7719 \endsetslot
7720
7721 \setslot{\lctop{Nacute}{nacute}}
7722   \comment{The letter '\` n'.}
7723 \endsetslot
7724
7725 \setslot{\lctop{Ncaron}{ncaron}}
7726   \comment{The letter '\v n'.}
7727 \endsetslot
7728
7729 \setslot{\lc{Eng}{eng}}
7730   \comment{The Sami letter '\ng'. It is unavailable in \plain\ \TeX. This needs
    to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in t1.etx in most cases,
    it seems.}
7731 \endsetslot
7732
7733 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
7734   \comment{The letter '\H o'.}
7735 \endsetslot
7736
7737 \setslot{\lctop{Racute}{racute}}
7738   \comment{The letter '\` r'.}

```

```

7739 \endsetslot
7740
7741 \setslot{\lctop{Rcaron}{rcaron}}
7742   \comment{The letter '\v r'.}
7743 \endsetslot
7744
7745 \setslot{\lctop{Sacute}{sacute}}
7746   \comment{The letter '\s' .}
7747 \endsetslot
7748
7749 \setslot{\lctop{Scaron}{scaron}}
7750   \comment{The letter '\v s'.}
7751 \endsetslot
7752
7753 \setslot{\lc{Scedilla}{scedilla}}
7754   \comment{The letter '\c s'.}
7755 \endsetslot
7756
7757 \setslot{\lctop{Tcaron}{tcaron}}
7758   \comment{The letter '\v t'.}
7759 \endsetslot
7760
7761 \setslot{\lc{Tcedilla}{tcedilla}}
7762   \comment{The letter '\c t'.}
7763 \endsetslot
7764
7765 \setslot{\lctop{Uhungarumlaut}{uhungarumlaut}}
7766   \comment{The letter '\H u'.}
7767 \endsetslot
7768
7769 \setslot{\lctop{Uring}{uring}}
7770   \comment{The letter '\r u'.}
7771 \endsetslot
7772
7773 \setslot{\lctop{Ydieresis}{ydieresis}}
7774   \comment{The letter '\y' .}
7775 \endsetslot
7776
7777 \setslot{\lctop{Zacute}{zacute}}
7778   \comment{The letter '\z' .}
7779 \endsetslot
7780
7781 \setslot{\lctop{Zcaron}{zcaron}}
7782   \comment{The letter '\v z'.}
7783 \endsetslot
7784
7785 \setslot{\lctop{Zdotaccent}{zdotaccent}}
7786   \comment{The letter '\. z'.}
7787 \endsetslot
7788
7789 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
7790
7791   \setslot{\lclig{IJ}{ij}}
7792     \comment{The letter 'ij'. This is a single letter, and in a

```

```
7793     monowidth font should ideally be one letter wide.}
7794 \endsetslot
7795
7796 \Fi
7797
7798 \setslot{exclamdown.superior}
7799   \comment{The Spanish punctuation mark '!' .}
7800 \endsetslot
7801
7802 \setslot{questiondown.superior}
7803   \comment{The Spanish punctuation mark '?' .}
7804 \endsetslot
7805
7806 \setslot{sterling.superior}
7807   \comment{The British currency mark '\textsterling' .}
7808 \endsetslot
7809
7810 \setslot{\uctop{Agrave}{agrave}}
7811   \comment{The letter '\` A'.}
7812 \endsetslot
7813
7814 \setslot{\uctop{Aacute}{aacute}}
7815   \comment{The letter '\^ A'.}
7816 \endsetslot
7817
7818 \setslot{\uctop{Acircumflex}{acircumflex}}
7819   \comment{The letter '\~ A'.}
7820 \endsetslot
7821
7822 \setslot{\uctop{Atilde}{atilde}}
7823   \comment{The letter '\~\` A'.}
7824 \endsetslot
7825
7826 \setslot{\uctop{Adieresis}{adieresis}}
7827   \comment{The letter '\u00c1'.}
7828 \endsetslot
7829
7830 \setslot{\uctop{Aring}{aring}}
7831   \comment{The letter '\r A'.}
7832 \endsetslot
7833
7834 \setslot{\uc{AE}{ae}}
7835   \comment{The letter '\AE'. This is a single letter, and should not be
7836     faked with 'AE'.}
7837 \endsetslot
7838
7839 \setslot{\uc{Ccedilla}{ccedilla}}
7840   \comment{The letter '\c C'.}
7841 \endsetslot
7842
7843 \setslot{\uctop{Egrave}{egrave}}
7844   \comment{The letter '\` E'.}
7845 \endsetslot
7846
```

```
7847 \setslot{\uctop{Eacute}{eacute}}
7848   \comment{The letter '\` E'.}
7849 \endsetslot
7850
7851 \setslot{\uctop{Ecircumflex}{ecircumflex}}
7852   \comment{The letter '\^ E'.}
7853 \endsetslot
7854
7855 \setslot{\uctop{Edieresis}{edieresis}}
7856   \comment{The letter '\" E'.}
7857 \endsetslot
7858
7859 \setslot{\uctop{Igrave}{igrave}}
7860   \comment{The letter '\` I'.}
7861 \endsetslot
7862
7863 \setslot{\uctop{Iacute}{iacute}}
7864   \comment{The letter '\` I'.}
7865 \endsetslot
7866
7867 \setslot{\uctop{Icircumflex}{icircumflex}}
7868   \comment{The letter '\^ I'.}
7869 \endsetslot
7870
7871 \setslot{\uctop{Idieresis}{idieresis}}
7872   \comment{The letter '\" I'.}
7873 \endsetslot
7874
7875 \setslot{\uc{Eth}{eth}}
7876   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
7877     with a horizontal bar through the stem. It is unavailable
7878     in \plain\ \TeX.}
7879 \endsetslot
7880
7881 \setslot{\uctop{Ntilde}{ntilde}}
7882   \comment{The letter '\~ N'.}
7883 \endsetslot
7884
7885 \setslot{\uctop{Ograve}{ograve}}
7886   \comment{The letter '\` O'.}
7887 \endsetslot
7888
7889 \setslot{\uctop{Oacute}{oacute}}
7890   \comment{The letter '\` O'.}
7891 \endsetslot
7892
7893 \setslot{\uctop{Ocircumflex}{ocircumflex}}
7894   \comment{The letter '\^ O'.}
7895 \endsetslot
7896
7897 \setslot{\uctop{Otilde}{otilde}}
7898   \comment{The letter '\~ O'.}
7899 \endsetslot
7900
```

```

7901 \setslot{\uctop{Odieresis}{odieresis}}
7902   \comment{The letter '\u00d8'.}
7903 \endsetslot
7904
7905 \setslot{\uc{OE}{oe}}
7906   \comment{The letter '\u00c6'. This is a single letter, and should not be
7907     faked with 'OE'.}
7908 \endsetslot
7909
7910 \setslot{\uc{0slash}{oslash}}
7911   \comment{The letter '\u00f8'.}
7912 \endsetslot
7913
7914 \setslot{\uctop{Ugrave}{ugrave}}
7915   \comment{The letter '\u00c3'.}
7916 \endsetslot
7917
7918 \setslot{\uctop{Uacute}{uacute}}
7919   \comment{The letter '\u00c1'.}
7920 \endsetslot
7921
7922 \setslot{\uctop{Ucircumflex}{ucircumflex}}
7923   \comment{The letter '\u00c2'.}
7924 \endsetslot
7925
7926 \setslot{\uctop{Udieresis}{udieresis}}
7927   \comment{The letter '\u00d8'.}
7928 \endsetslot
7929
7930 \setslot{\uctop{Yacute}{yacute}}
7931   \comment{The letter '\u00c5'.}
7932 \endsetslot
7933
7934 \setslot{\uc{Thorn}{thorn}}
7935   \comment{The Icelandic capital letter Thorn, similar to a 'P'
7936     with the bowl moved down. It is unavailable in \plain\ \TeX.}
7937 \endsetslot
7938
7939 \setslot{\uclig{SS}{germandbls}}
7940   \comment{The ligature 'SS', used to give an upper case '\ss'.
7941     In a monowidth font it should be two letters wide.}
7942 \endsetslot
7943
7944 \setslot{\lctop{Agrave}{agrave}}
7945   \comment{The letter '\u00e1'.}
7946 \endsetslot
7947
7948 \setslot{\lctop{Aacute}{aacute}}
7949   \comment{The letter '\u00e1'.}
7950 \endsetslot
7951
7952 \setslot{\lctop{Acircumflex}{acircumflex}}
7953   \comment{The letter '\u00e2'.}
7954 \endsetslot

```

```
7955 \setslot{\lctop{Atilde}{atilde}}
7956     \comment{The letter '\~ a'.}
7957 \endsetslot
7958
7959 \setslot{\lctop{Adieresis}{adieresis}}
7960     \comment{The letter '\" a'.}
7961 \endsetslot
7962
7963 \setslot{\lctop{Aring}{aring}}
7964     \comment{The letter '\r a'.}
7965 \endsetslot
7966
7967 \setslot{\lc{AE}{ae}}
7968     \comment{The letter '\ae'. This is a single letter, and should not be
7969         faked with 'ae'.}
7970 \endsetslot
7971
7972 \setslot{\lc{Ccedilla}{ccedilla}}
7973     \comment{The letter '\c c'.}
7974 \endsetslot
7975
7976 \setslot{\lctop{Egrave}{egrave}}
7977     \comment{The letter '\` e'.}
7978 \endsetslot
7979
7980 \setslot{\lctop{Eacute}{eacute}}
7981     \comment{The letter '\^ e'.}
7982 \endsetslot
7983
7984 \setslot{\lctop{Ecircumflex}{ecircumflex}}
7985     \comment{The letter '\~ e'.}
7986 \endsetslot
7987
7988 \setslot{\lctop{Edieresis}{edieresis}}
7989     \comment{The letter '\" e'.}
7990 \endsetslot
7991
7992 \setslot{\lctop{Igrave}{igrave}}
7993     \comment{The letter '\` i'.}
7994 \endsetslot
7995
7996 \setslot{\lctop{Iacute}{iacute}}
7997     \comment{The letter '\^ i'.}
7998 \endsetslot
7999
8000 \setslot{\lctop{Icircumflex}{icircumflex}}
8001     \comment{The letter '\~\i'.}
8002 \endsetslot
8003
8004 \setslot{\lctop{Idieresis}{idieresis}}
8005     \comment{The letter '\\" i'.}
8006 \endsetslot
8007
8008
```

```
8009 \setslot{\lc{Eth}{eth}}
8010   \comment{The Icelandic lowercase letter ‘eth’ similar to
8011     a ‘$\partial$’ with an oblique bar through the stem.
8012     It is unavailable in \plain\ \TeX.}
8013 \endsetslot
8014
8015 \setslot{\lctop{Ntilde}{ntilde}}
8016   \comment{The letter ‘\~n’.}
8017 \endsetslot
8018
8019 \setslot{\lctop{Ograve}{ograve}}
8020   \comment{The letter ‘\`o’.}
8021 \endsetslot
8022
8023 \setslot{\lctop{Oacute}{oacute}}
8024   \comment{The letter ‘\^o’.}
8025 \endsetslot
8026
8027 \setslot{\lctop{Ocircumflex}{ocircumflex}}
8028   \comment{The letter ‘\^o’.}
8029 \endsetslot
8030
8031 \setslot{\lctop{Otilde}{otilde}}
8032   \comment{The letter ‘\~o’.}
8033 \endsetslot
8034
8035 \setslot{\lctop{Odieresis}{odieresis}}
8036   \comment{The letter ‘\"o’.}
8037 \endsetslot
8038
8039 \setslot{\lc{OE}{oe}}
8040   \comment{The letter ‘oe’. This is a single letter, and should not be
8041     faked with ‘oe’.}
8042 \endsetslot
8043
8044 \setslot{\lc{Oslash}{oslash}}
8045   \comment{The letter ‘\o’.}
8046 \endsetslot
8047
8048 \setslot{\lctop{Ugrave}{ugrave}}
8049   \comment{The letter ‘\`u’.}
8050 \endsetslot
8051
8052 \setslot{\lctop{Uacute}{uacute}}
8053   \comment{The letter ‘\^u’.}
8054 \endsetslot
8055
8056 \setslot{\lctop{Ucircumflex}{ucircumflex}}
8057   \comment{The letter ‘\^u’.}
8058 \endsetslot
8059
8060 \setslot{\lctop{Udieresis}{udieresis}}
8061   \comment{The letter ‘\"u’.}
8062 \endsetslot
```

```

8063 \setslot{\lctop{Yacute}{yacute}}
8064   \comment{The letter '\` y'.}
8065 \endsetslot
8066
8067 \setslot{\lc{Thorn}{thorn}}
8068   \comment{The Icelandic lowercase letter 'thorn', similar to a 'p'
8069     with an ascender rising from the stem. It is unavailable
8070     in \plain\ \TeX.}
8071 \endsetslot
8072
8073 \setslot{\lc{SS}{germandbls}}
8074   \comment{The letter '\ss'.}
8075 \endsetslot
8076
8077 \endencoding

```

#### 4.3.12 t1-f\_f.etx

t1-f\_f.etx (etx)

```

8079 %%
8080 %% - The commentary in the original is deleted in this version. For
8081 %% information about the T1 etc., typeset the original t1.etx
8082 %% included with fontinst.
8083 %% - Slots are altered to accommodate characters which are named
8084 %% differently. For example, this encoding uses "endash" and "emdash"
8085 %% whereas t1.etx called for "rangedash" and "punctdash".
8086 %% - The original notices at the top of that file concerning authors,
8087 %% maintenance etc. are replaced by this notice.
8088 %% - The file is renamed.
8089 %% - The encoding name is modified.
8090 %% - f_f, f_f_i and f_f_l replace ff, ffi and ffl.
8091 %%
8092 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
8093 \relax
8094 \encoding
8095
8096 \needsfontinstversion{1.910}
8097
8098 \setcommand\lc#1#2{#2}
8099 \setcommand\uc#1#2{#1}
8100 \setcommand\lctop#1#2{#2}
8101 \setcommand\uctop#1#2{#1}
8102 \setcommand\lclig#1#2{#2}
8103 \ifisint{letterspacing}\then
8104   \ifnumber{\int{letterspacing}}={0}\then \Else
8105     \setcommand\uclig#1#2{#1spaced}
8106     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|#1spaced|, but
8107       you can't see it as \verb|\verb|\setcommand| commands are invisible in
8108       the typeset output.}
8109   \Fi
8110 \Fi

```

```

8111 \setcommand\uclig{\#1\#2{\#1}}
8112 \setcommand\digit{\#1{\#1}}
8113
8114 \ifisint{monowidth}\then
8115   \setint{ligaturing}{0}
8116 \Else
8117   % The following empty line is *important* to get the formatting
8118   % right here (sigh)! (Remember that it is a \par token.)
8119
8120 \ifisint{letterspacing}\then
8121   \ifnumber{\int{letterspacing}}={0}\then \Else
8122     \setint{ligaturing}{0}
8123   \Fi
8124   \Fi
8125 \setint{ligaturing}{1}
8126 \Fi
8127
8128 \setint{italicslant}{0}
8129 \setint{quad}{1000}
8130 \setint{baselineskip}{1200}
8131
8132 \ifisglyph{x}\then
8133   \setint{xheight}{\height{x}}
8134 \Else
8135   \setint{xheight}{500}
8136 \Fi
8137
8138 \ifisglyph{space}\then
8139   \setint{interword}{\width{space}}
8140 \Else\ifisglyph{i}\then
8141   \setint{interword}{\width{i}}
8142 \Else
8143   \setint{interword}{333}
8144 \Fi\Fi
8145
8146 \ifisint{monowidth}\then
8147   \setint{stretchword}{0}
8148   \setint{shrinkword}{0}
8149   \setint{extraspace}{\int{interword}}
8150 \Else
8151   \setint{stretchword}{\scale{\int{interword}}{600}}
8152   \setint{shrinkword}{\scale{\int{interword}}{240}}
8153   \setint{extraspace}{\scale{\int{interword}}{240}}
8154 \Fi
8155
8156 \ifisglyph{X}\then
8157   \setint{capheight}{\height{X}}
8158 \Else
8159   \setint{capheight}{750}
8160 \Fi
8161
8162 \ifisglyph{d}\then
8163   \setint{ascender}{\height{d}}
8164 \Else\ifisint{capheight}\then

```

```

8165   \setint{ascender}{\int{capheight}}
8166   \Else
8167     \setint{ascender}{750}
8168   \Fi\Fi
8169
8170   \ifisglyph{Aring}\then
8171     \setint{acccapheight}{\height{Aring}}
8172   \Else
8173     \setint{acccapheight}{999}
8174   \Fi
8175
8176   \ifisint{descender_neg}\then
8177     \setint{descender}{\neg{\int{descender_neg}}}
8178   \Else\ifisglyph{p}\then
8179     \setint{descender}{\depth{p}}
8180   \Else
8181     \setint{descender}{250}
8182   \Fi\Fi
8183
8184   \ifisglyph{Aring}\then
8185     \setint{maxheight}{\height{Aring}}
8186   \Else
8187     \setint{maxheight}{1000}
8188   \Fi
8189
8190   \ifisint{maxdepth_neg}\then
8191     \setint{maxdepth}{\neg{\int{maxdepth_neg}}}
8192   \Else\ifisglyph{j}\then
8193     \setint{maxdepth}{\depth{j}}
8194   \Else
8195     \setint{maxdepth}{250}
8196   \Fi\Fi
8197
8198   \ifisglyph{six}\then
8199     \setint{digitwidth}{\width{six}}
8200   \Else
8201     \setint{digitwidth}{500}
8202   \Fi
8203
8204   \setint{capstem}{0} % not in AFM files
8205
8206   \setfontdimen{1}{italicslant}      % italic slant
8207   \setfontdimen{2}{interword}        % interword space
8208   \setfontdimen{3}{stretchword}      % interword stretch
8209   \setfontdimen{4}{shrinkword}       % interword shrink
8210   \setfontdimen{5}{xheight}          % x-height
8211   \setfontdimen{6}{quad}             % quad
8212   \setfontdimen{7}{extraspace}       % extra space after .
8213   \setfontdimen{8}{capheight}         % cap height
8214   \setfontdimen{9}{ascender}          % ascender
8215   \setfontdimen{10}{acccapheight}     % accented cap height
8216   \setfontdimen{11}{descender}         % descender's depth
8217   \setfontdimen{12}{maxheight}         % max height
8218   \setfontdimen{13}{maxdepth}          % max depth

```

```

8219 \setfontdimen{14}{digitwidth}    % digit width
8220 \setfontdimen{15}{verticalstem}  % dominant width of vertical stems
8221 \setfontdimen{16}{baselineskip} % baselineskip
8222
8223 \ifnumber{\int{ligaturing}}<{0}\then
8224   \comment{In this case, the codingscheme can be different from the
8225     default, and therefore we refrain from setting it.}
8226 \Else
8227   \setstr{codingscheme}{EXTENDED TEX ENC - F_F}
8228 \Fi
8229
8230 \setslot{\lc{Grave}{grave}}
8231   \comment{The grave accent '\{}.'}
8232 \endsetslot
8233
8234 \setslot{\lc{Acute}{acute}}
8235   \comment{The acute accent '\{}.'}
8236 \endsetslot
8237
8238 \setslot{\lc{Circumflex}{circumflex}}
8239   \comment{The circumflex accent '\^{'}.'}
8240 \endsetslot
8241
8242 \setslot{\lc{Tilde}{tilde}}
8243   \comment{The tilde accent '\~{}.'}
8244 \endsetslot
8245
8246 \setslot{\lc{Dieresis}{dieresis}}
8247   \comment{The umlaut or dieresis accent '\\"{}.'}
8248 \endsetslot
8249
8250 \setslot{\lc{Hungarumlaut}{hungarumlaut}}
8251   \comment{The long Hungarian umlaut '\H{}.'}
8252 \endsetslot
8253
8254 \setslot{\lc{Ring}{ring}}
8255   \comment{The ring accent '\r{}.'}
8256 \endsetslot
8257
8258 \setslot{\lc{Caron}{caron}}
8259   \comment{The caron or h'a\v cek accent '\v{}.'}
8260 \endsetslot
8261
8262 \setslot{\lc{Breve}{breve}}
8263   \comment{The breve accent '\u{}.'}
8264 \endsetslot
8265
8266 \setslot{\lc{Macron}{macron}}
8267   \comment{The macron accent '\={}' .}
8268 \endsetslot
8269
8270 \setslot{\lc{Dotaccent}{dotaccent}}
8271   \comment{The dot accent '\.{}' .}
8272 \endsetslot

```

```

8273 \setslot{\lc{Cedilla}{cedilla}}
8274   \comment{The cedilla accent '\c {}'.}
8275 \endsetslot
8277
8278 \setslot{\lc{Ogonek}{ogonek}}
8279   \comment{The ogonek accent '\k {}'.}
8280 \endsetslot
8281
8282 \setslot{quotesinglbase}
8283   \comment{A German single quote mark '\quotesinglbase' similar to a comma,
8284       but with different sidebearings.}
8285 \endsetslot
8286
8287 \setslot{guilsinglleft}
8288   \comment{A French single opening quote mark '\guilsinglleft',
8289       unavailable in \plain\ \TeX.}
8290 \endsetslot
8291
8292 \setslot{guilsinglright}
8293   \comment{A French single closing quote mark '\guilsinglright',
8294       unavailable in \plain\ \TeX.}
8295 \endsetslot
8296
8297 \setslot{quotedblleft}
8298   \comment{The English opening quote mark '\textquotedblleft','}
8299 \endsetslot
8300
8301 \setslot{quotedblright}
8302   \comment{The English closing quote mark '\textquotedblright','}
8303 \endsetslot
8304
8305 \setslot{quotedblbase}
8306   \comment{A German double quote mark '\quotedblbase' similar to two commas,
8307       but with tighter letterspacing and different sidebearings.}
8308 \endsetslot
8309
8310 \setslot{guillemotleft}
8311   \comment{A French double opening quote mark '\guillemotleft',
8312       unavailable in \plain\ \TeX.}
8313 \endsetslot
8314
8315 \setslot{guillemotright}
8316   \comment{A French closing opening quote mark '\guillemotright',
8317       unavailable in \plain\ \TeX.}
8318 \endsetslot
8319
8320 \setslot{endash}
8321   \ligature{LIG}{hyphen}{emdash}
8322   \comment{The number range dash '1--9'.
8323       This is called 'rangedash' by fontinst's t1.etx, but it needs to be
8324       called 'endash' to work right.
8325       The '\textendash'. In a monowidth font, this might be set as
8326       '\texttt{1{-}9}'.}

```

```

8327 \endsetslot
8328
8329 \setslot{emdash}
8330   \comment{The punctuation dash ‘Oh---boy.’
8331     This is calle ‘punctdash’ by fontinst’s t1.etx, but needs to be
8332     called ‘emdash’ to work right.
8333     The ‘\textemdash’.
8334     In a monowidth font, this might be set as ‘\texttt{Oh{-}{}{-}boy.}’}
8335 \endsetslot
8336
8337 \setslot{compwordmark}
8338   \comment{An invisible glyph, with zero width and depth, but the
8339     height of lowercase letters without ascenders.
8340     It is used to stop ligaturing in words like ‘shelf{}ful’.}
8341 \endsetslot
8342
8343 \setslot{perthousandzero}
8344   \comment{A glyph which is placed after ‘\%’ to produce a
8345     ‘per-thousand’, or twice to produce ‘per-ten-thousand’.
8346     Your guess is as good as mine as to what this glyph should look
8347     like in a monowidth font.}
8348 \endsetslot
8349
8350 \setslot{\lc{dotlessI}{dotlessi}}
8351   \comment{A dotless i ‘\i’, used to produce accented letters such as
8352     ‘=\i’.}
8353 \endsetslot
8354
8355 \setslot{\lc{dotlessJ}{dotlessj}}
8356   \comment{A dotless j ‘\j’, used to produce accented letters such as
8357     ‘=\j’. Most non-\TeX\ fonts do not have this glyph.}
8358 \endsetslot
8359
8360 \ifnumber{\int{ligaturing}}<{0}\then \skipslots{5}\Else
8361
8362 \setslot{\lclig{FF}{f_f}}
8363   \ifnumber{\int{ligaturing}}>{0}\then
8364     \ligature{LIG}{\lc{I}{i}}{\lclig{FFI}{f_f_i}}
8365     \ligature{LIG}{\lc{L}{l}}{\lclig{FFL}{f_f_l}}
8366     \Fi
8367     \comment{The ‘ff’ ligature. It should be two characters wide in a
8368       monowidth font.}
8369 \endsetslot
8370
8371 \setslot{\lclig{FI}{fi}}
8372   \comment{The ‘fi’ ligature. It should be two characters wide in a
8373       monowidth font.}
8374 \endsetslot
8375
8376 \setslot{\lclig{FL}{fl}}
8377   \comment{The ‘fl’ ligature. It should be two characters wide in a
8378       monowidth font.}
8379 \endsetslot
8380

```

```

8381 \setslot{\lclig{FFI}{f_f_i}}
8382   \comment{The 'ffi' ligature. It should be three characters wide in a
8383     monowidth font.}
8384 \endsetslot
8385
8386 \setslot{\lclig{FFL}{f_f_l}}
8387   \comment{The 'ffl' ligature. It should be three characters wide in a
8388     monowidth font.}
8389 \endsetslot
8390
8391 \Fi
8392
8393 \setslot{visiblespace}
8394   \comment{A visible space glyph '\textvisiblespace'.}
8395 \endsetslot
8396
8397 \setslot{exclam}
8398   \ligature{LIG}{quotelleft}{exclamdown}
8399   \comment{The exclamation mark '!'.}
8400 \endsetslot
8401
8402 \setslot{quotedbl}
8403   \comment{The 'neutral' double quotation mark '\textquotedbl',,
8404     included for use in monowidth fonts, or for setting computer
8405     programs. Note that the inclusion of this glyph in this slot
8406     means that \TeX\ documents which used '{\tt\char"} as an
8407     input character will no longer work.}
8408 \endsetslot
8409
8410 \setslot{numbersign}
8411   \comment{The hash sign '#'.}
8412 \endsetslot
8413
8414 \setslot{dollar}
8415   \comment{The dollar sign '$'.}
8416 \endsetslot
8417
8418 \setslot{percent}
8419   \comment{The percent sign '%'.}
8420 \endsetslot
8421
8422 \setslot{ampersand}
8423   \comment{The ampersand sign '&'.}
8424 \endsetslot
8425
8426 \setslot{quoteright}
8427   \ligature{LIG}{quoteright}{quotedblrigh}
8428   \comment{The English closing single quote mark '\textquoteright,'.}
8429 \endsetslot
8430
8431 \setslot{parenleft}
8432   \comment{The opening parenthesis '('.}
8433 \endsetslot
8434

```

```
8435 \setslot{parenright}
8436     \comment{The closing parenthesis ')'.}
8437 \endsetslot
8438
8439 \setslot{asterisk}
8440     \comment{The raised asterisk '*' .}
8441 \endsetslot
8442
8443 \setslot{plus}
8444     \comment{The addition sign '+' .}
8445 \endsetslot
8446
8447 \setslot{comma}
8448     \ligature{LIG}{comma}{quotedblbase}
8449     \comment{The comma ',' .}
8450 \endsetslot
8451
8452 \setslot{hyphen}
8453     \ligature{LIG}{hyphen}{endash}
8454     \ligature{LIG}{hyphenchar}{hyphenchar}
8455     \comment{The hyphen '-' .}
8456 \endsetslot
8457
8458 \setslot{period}
8459     \comment{The period '.' .}
8460 \endsetslot
8461
8462 \setslot{slash}
8463     \comment{The forward oblique '/'.}
8464 \endsetslot
8465
8466 \setslot{\digit{zero}}
8467     \comment{The number '0'. This (and all the other numerals) may be
8468         old style or ranging digits.}
8469 \endsetslot
8470
8471 \setslot{\digit{one}}
8472     \comment{The number '1' .}
8473 \endsetslot
8474
8475 \setslot{\digit{two}}
8476     \comment{The number '2' .}
8477 \endsetslot
8478
8479 \setslot{\digit{three}}
8480     \comment{The number '3' .}
8481 \endsetslot
8482
8483 \setslot{\digit{four}}
8484     \comment{The number '4' .}
8485 \endsetslot
8486
8487 \setslot{\digit{five}}
8488     \comment{The number '5' .}
```

```
8489 \endsetslot
8490
8491 \setslot{\digit{six}}
8492     \comment{The number '6'.}
8493 \endsetslot
8494
8495 \setslot{\digit{seven}}
8496     \comment{The number '7'.}
8497 \endsetslot
8498
8499 \setslot{\digit{eight}}
8500     \comment{The number '8'.}
8501 \endsetslot
8502
8503 \setslot{\digit{nine}}
8504     \comment{The number '9'.}
8505 \endsetslot
8506
8507 \setslot{colon}
8508     \comment{The colon punctuation mark ':' .}
8509 \endsetslot
8510
8511 \setslot{semicolon}
8512     \comment{The semi-colon punctuation mark ';' .}
8513 \endsetslot
8514
8515 \setslot{less}
8516     \ligature[LIG]{less}{guillemotleft}
8517     \comment{The less-than sign '\textless' .}
8518 \endsetslot
8519
8520 \setslot{equal}
8521     \comment{The equals sign '=' .}
8522 \endsetslot
8523
8524 \setslot{greater}
8525     \ligature[LIG]{greater}{guillemotright}
8526     \comment{The greater-than sign '\textgreater' .}
8527 \endsetslot
8528
8529 \setslot{question}
8530     \ligature[LIG]{quotelleft}{questiondown}
8531     \comment{The question mark '?' .}
8532 \endsetslot
8533
8534 \setslot{at}
8535     \comment{The at sign '@' .}
8536 \endsetslot
8537
8538 \setslot{\uc{A}{a}}
8539     \comment{The letter '{A}' .}
8540 \endsetslot
8541
8542 \setslot{\uc{B}{b}}
```

```
8543     \comment{The letter '{B}'.}
8544     \endsetslot
8545
8546     \setslot{\uc{C}{c}}
8547         \comment{The letter '{C}'.}
8548     \endsetslot
8549
8550     \setslot{\uc{D}{d}}
8551         \comment{The letter '{D}'.}
8552     \endsetslot
8553
8554     \setslot{\uc{E}{e}}
8555         \comment{The letter '{E}'.}
8556     \endsetslot
8557
8558     \setslot{\uc{F}{f}}
8559         \comment{The letter '{F}'.}
8560     \endsetslot
8561
8562     \setslot{\uc{G}{g}}
8563         \comment{The letter '{G}'.}
8564     \endsetslot
8565
8566     \setslot{\uc{H}{h}}
8567         \comment{The letter '{H}'.}
8568     \endsetslot
8569
8570     \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8571
8572     \setslot{\uc{I}{i}}
8573         \comment{The letter '{I}'.}
8574     \endsetslot
8575
8576     \Fi
8577
8578     \setslot{\uc{J}{j}}
8579         \comment{The letter '{J}'.}
8580     \endsetslot
8581
8582     \setslot{\uc{K}{k}}
8583         \comment{The letter '{K}'.}
8584     \endsetslot
8585
8586     \setslot{\uc{L}{l}}
8587         \comment{The letter '{L}'.}
8588     \endsetslot
8589
8590     \setslot{\uc{M}{m}}
8591         \comment{The letter '{M}'.}
8592     \endsetslot
8593
8594     \setslot{\uc{N}{n}}
8595         \comment{The letter '{N}'.}
8596     \endsetslot
```

```

8597 \setslot{\uc{O}{o}}
8598   \comment{The letter '{O}'.}
8599 \endsetslot
8600
8601 \setslot{\uc{P}{p}}
8602   \comment{The letter '{P}'.}
8603 \endsetslot
8604
8605 \setslot{\uc{Q}{q}}
8606   \comment{The letter '{Q}'.}
8607 \endsetslot
8608
8609 \setslot{\uc{R}{r}}
8610   \comment{The letter '{R}'.}
8611 \endsetslot
8612
8613 \setslot{\uc{S}{s}}
8614   \comment{The letter '{S}'.}
8615 \endsetslot
8616
8617 \setslot{\uc{T}{t}}
8618   \comment{The letter '{T}'.}
8619 \endsetslot
8620
8621 \setslot{\uc{U}{u}}
8622   \comment{The letter '{U}'.}
8623 \endsetslot
8624
8625 \setslot{\uc{V}{v}}
8626   \comment{The letter '{V}'.}
8627 \endsetslot
8628
8629 \setslot{\uc{W}{w}}
8630   \comment{The letter '{W}'.}
8631 \endsetslot
8632
8633 \setslot{\uc{X}{x}}
8634   \comment{The letter '{X}'.}
8635 \endsetslot
8636
8637 \setslot{\uc{Y}{y}}
8638   \comment{The letter '{Y}'.}
8639 \endsetslot
8640
8641 \setslot{\uc{Z}{z}}
8642   \comment{The letter '{Z}'.}
8643 \endsetslot
8644
8645 \setslot{bracketleft}
8646   \comment{The opening square bracket '['.}
8647 \endsetslot
8648
8649 \setslot{backslash}
8650

```

```
8651     \comment{The backwards oblique ‘\textbackslash’.}
8652     \endsetslot
8653
8654     \setslot{bracketright}
8655         \comment{The closing square bracket ‘]’.}
8656     \endsetslot
8657
8658     \setslot{asciicircum}
8659         \comment{The ASCII upward-pointing arrow head ‘\textasciicircum’.
8660             This is included for compatibility with typewriter fonts used
8661             for computer listings.}
8662     \endsetslot
8663
8664     \setslot{underscore}
8665         \comment{The ASCII underline character ‘\textunderline’, usually
8666             set on the baseline.
8667             This is included for compatibility with typewriter fonts used
8668             for computer listings.}
8669     \endsetslot
8670
8671     \setslot{quotyleft}
8672         \ligature{LIG}{quotyleft}{quotedblleft}
8673         \comment{The English opening single quote mark ‘\,\textquotyleft\,’.}
8674     \endsetslot
8675
8676     \setslot{\lc{A}{a}}
8677         \comment{The letter ‘{a}’.}
8678     \endsetslot
8679
8680     \setslot{\lc{B}{b}}
8681         \comment{The letter ‘{b}’.}
8682     \endsetslot
8683
8684 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8685
8686     \setslot{\lc{C}{c}}
8687         \comment{The letter ‘{c}’.}
8688     \endsetslot
8689
8690 \Fi
8691
8692     \setslot{\lc{D}{d}}
8693         \comment{The letter ‘{d}’.}
8694     \endsetslot
8695
8696     \setslot{\lc{E}{e}}
8697         \comment{The letter ‘{e}’.}
8698     \endsetslot
8699
8700 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8701
8702     \setslot{\lc{F}{f}}
8703         \ifnumber{\int{ligaturing}}>{0}\then
8704             \ligature{LIG}{\lc{I}{i}}{\lc{I}{i}}
```

```
8705          \ligature{LIG}{\lc{F}{f}}{\lclig{FF}{f_f}}
8706          \ligature{LIG}{\lc{L}{l}}{\lclig{FL}{f_l}}
8707          \Fi
8708          \comment{The letter '{f}'.}
8709          \endsetslot
8710
8711 \Fi
8712
8713 \setslot{\lc{G}{g}}
8714     \comment{The letter '{g}'.}
8715 \endsetslot
8716
8717 \setslot{\lc{H}{h}}
8718     \comment{The letter '{h}'.}
8719 \endsetslot
8720
8721 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8722
8723     \setslot{\lc{I}{i}}
8724     \comment{The letter '{i}'.}
8725     \endsetslot
8726
8727 \Fi
8728
8729 \setslot{\lc{J}{j}}
8730     \comment{The letter '{j}'.}
8731 \endsetslot
8732
8733 \setslot{\lc{K}{k}}
8734     \comment{The letter '{k}'.}
8735 \endsetslot
8736
8737 \setslot{\lc{L}{l}}
8738     \comment{The letter '{l}'.}
8739 \endsetslot
8740
8741 \setslot{\lc{M}{m}}
8742     \comment{The letter '{m}'.}
8743 \endsetslot
8744
8745 \setslot{\lc{N}{n}}
8746     \comment{The letter '{n}'.}
8747 \endsetslot
8748
8749 \setslot{\lc{O}{o}}
8750     \comment{The letter '{o}'.}
8751 \endsetslot
8752
8753 \setslot{\lc{P}{p}}
8754     \comment{The letter '{p}'.}
8755 \endsetslot
8756
8757 \setslot{\lc{Q}{q}}
8758     \comment{The letter '{q}'.}
```

```
8759 \endsetslot
8760
8761 \setslot{\lc{R}{r}}
8762   \comment{The letter '{r}'.}
8763 \endsetslot
8764
8765 \ifnumber{\int{ligaturing}}<{-1}\then \skipslots{1}\Else
8766
8767 \setslot{\lc{S}{s}}
8768   \comment{The letter '{s}'.}
8769 \endsetslot
8770
8771 \Fi
8772
8773 \setslot{\lc{T}{t}}
8774   \comment{The letter '{t}'.}
8775 \endsetslot
8776
8777 \setslot{\lc{U}{u}}
8778   \comment{The letter '{u}'.}
8779 \endsetslot
8780
8781 \setslot{\lc{V}{v}}
8782   \comment{The letter '{v}'.}
8783 \endsetslot
8784
8785 \setslot{\lc{W}{w}}
8786   \comment{The letter '{w}'.}
8787 \endsetslot
8788
8789 \setslot{\lc{X}{x}}
8790   \comment{The letter '{x}'.}
8791 \endsetslot
8792
8793 \setslot{\lc{Y}{y}}
8794   \comment{The letter '{y}'.}
8795 \endsetslot
8796
8797 \setslot{\lc{Z}{z}}
8798   \comment{The letter '{z}'.}
8799 \endsetslot
8800
8801 \setslot{braceleft}
8802   \comment{The opening curly brace '\textbraceleft'.}
8803 \endsetslot
8804
8805 \setslot{bar}
8806   \comment{The ASCII vertical bar '\textbar'.
8807     This is included for compatibility with typewriter fonts used
8808     for computer listings.}
8809 \endsetslot
8810
8811 \setslot{braceright}
8812   \comment{The closing curly brace '\textbraceright'.}
```

```
8813 \endsetslot
8814
8815 \setslot{asciitilde}
8816   \comment{The ASCII tilde ‘\textasciitilde’.
8817     This is included for compatibility with typewriter fonts used
8818     for computer listings.}
8819 \endsetslot
8820
8821 \setslot{hyphenchar}
8822   \comment{The glyph used for hyphenation in this font, which will
8823     almost always be the same as ‘hyphen’.}
8824 \endsetslot
8825
8826 \setslot{\uctop{Abreve}{abreve}}
8827   \comment{The letter ‘\u A’.}
8828 \endsetslot
8829
8830 \setslot{\uc{Aogonek}{aogonek}}
8831   \comment{The letter ‘\k A’.}
8832 \endsetslot
8833
8834 \setslot{\uctop{Cacute}{cacute}}
8835   \comment{The letter ‘\` C’.}
8836 \endsetslot
8837
8838 \setslot{\uctop{Ccaron}{ccaron}}
8839   \comment{The letter ‘\v C’.}
8840 \endsetslot
8841
8842 \setslot{\uctop{Dcaron}{dcaron}}
8843   \comment{The letter ‘\v D’.}
8844 \endsetslot
8845
8846 \setslot{\uctop{Ecaron}{ecaron}}
8847   \comment{The letter ‘\v E’.}
8848 \endsetslot
8849
8850 \setslot{\uc{Eogonek}{eogonek}}
8851   \comment{The letter ‘\k E’.}
8852 \endsetslot
8853
8854 \setslot{\uctop{Gbreve}{gbreve}}
8855   \comment{The letter ‘\u G’.}
8856 \endsetslot
8857
8858 \setslot{\uctop{Lacute}{lacute}}
8859   \comment{The letter ‘\` L’.}
8860 \endsetslot
8861
8862 \setslot{\uc{Lcaron}{lcaron}}
8863   \comment{The letter ‘\v L’.}
8864 \endsetslot
8865
8866 \setslot{\uc{Lslash}{lslash}}
```

```

8867     \comment{The letter '\L'.}
8868 \endsetslot
8869
8870 \setslot{\uctop{Nacute}{nacute}}
8871     \comment{The letter '\ N'.}
8872 \endsetslot
8873
8874 \setslot{\uctop{Ncaron}{ncaron}}
8875     \comment{The letter '\v N'.}
8876 \endsetslot
8877
8878 \setslot{\uc{Eng}{eng}}
8879     \comment{The Sami letter '\NG'. It is unavailable in \plain\ \TeX. This needs
      to be called 'Eng'/'eng' rather than 'Ng'/'ng' as in t1.etx in most cases, it
      seems.}
8880 \endsetslot
8881
8882 \setslot{\uctop{Ohungarumlaut}{ohungarumlaut}}
8883     \comment{The letter '\H O'.}
8884 \endsetslot
8885
8886 \setslot{\uctop{Racute}{racute}}
8887     \comment{The letter '\ R'.}
8888 \endsetslot
8889
8890 \setslot{\uctop{Rcaron}{rcaron}}
8891     \comment{The letter '\v R'.}
8892 \endsetslot
8893
8894 \setslot{\uctop{Sacute}{sacute}}
8895     \comment{The letter '\ S'.}
8896 \endsetslot
8897
8898 \setslot{\uctop{Scaron}{scaron}}
8899     \comment{The letter '\v S'.}
8900 \endsetslot
8901
8902 \setslot{\uc{Scedilla}{scedilla}}
8903     \comment{The letter '\c S'.}
8904 \endsetslot
8905
8906 \setslot{\uctop{Tcaron}{tcaron}}
8907     \comment{The letter '\v T'.}
8908 \endsetslot
8909
8910 \setslot{\uc{Tcedilla}{tcedilla}}
8911     \comment{The letter '\c T'.}
8912 \endsetslot
8913
8914 \setslot{\uctop{Uhungarumlaut}{uhungarumlaut}}
8915     \comment{The letter '\H U'.}
8916 \endsetslot
8917
8918 \setslot{\uctop{Uring}{uring}}

```

```

8919     \comment{The letter '\r U'.}
8920     \endsetslot
8921
8922     \setslot{\uctop{Ydieresis}{ydieresis}}
8923         \comment{The letter '\" Y'.}
8924     \endsetslot
8925
8926     \setslot{\uctop{Zacute}{zacute}}
8927         \comment{The letter '\` Z'.}
8928     \endsetslot
8929
8930     \setslot{\uctop{Zcaron}{zcaron}}
8931         \comment{The letter '\v Z'.}
8932     \endsetslot
8933
8934     \setslot{\uctop{Zdotaccent}{zdotaccent}}
8935         \comment{The letter '\. Z'.}
8936     \endsetslot
8937
8938     \ifnumber{\int{ligaturing}}<{0}\then \skipslots{1}\Else
8939
8940     \setslot{\uclig{IJ}{ij}}
8941         \comment{The letter 'IJ'. This is a single letter, and in a
8942             monowidth font should ideally be one letter wide.}
8943     \endsetslot
8944
8945     \Fi
8946
8947     \setslot{\uctop{Idotaccent}{idotaccent}}
8948         \comment{The letter '\. I'.}
8949     \endsetslot
8950
8951     \setslot{\lc{Dbar}{dbar}}
8952         \comment{The letter '\dj'.}
8953     \endsetslot
8954
8955     \setslot{section}
8956         \comment{The section mark '\textsection'.}
8957     \endsetslot
8958
8959     \setslot{\lctop{Abreve}{abreve}}
8960         \comment{The letter '\u a'.}
8961     \endsetslot
8962
8963     \setslot{\lc{Aogonek}{aogonek}}
8964         \comment{The letter '\k a'.}
8965     \endsetslot
8966
8967     \setslot{\lctop{Cacute}{cacute}}
8968         \comment{The letter '\c c'.}
8969     \endsetslot
8970
8971     \setslot{\lctop{Ccaron}{ccaron}}
8972         \comment{The letter '\v c'.}

```

```

8973 \endsetslot
8974
8975 \setslot{\lctop{Dcaron}{dcaron}}
8976   \comment{The letter '\v d'.}
8977 \endsetslot
8978
8979 \setslot{\lctop{Ecaron}{ecaron}}
8980   \comment{The letter '\v e'.}
8981 \endsetslot
8982
8983 \setslot{\lc{Eogonek}{eogonek}}
8984   \comment{The letter '\k e'.}
8985 \endsetslot
8986
8987 \setslot{\lctop{Gbreve}{gbreve}}
8988   \comment{The letter '\u g'.}
8989 \endsetslot
8990
8991 \setslot{\lctop{Lacute}{lacute}}
8992   \comment{The letter '\l'.}
8993 \endsetslot
8994
8995 \setslot{\lc{Lcaron}{lcaron}}
8996   \comment{The letter '\v l'.}
8997 \endsetslot
8998
8999 \setslot{\lc{Lslash}{lslash}}
9000   \comment{The letter '\l'.}
9001 \endsetslot
9002
9003 \setslot{\lctop{Nacute}{nacute}}
9004   \comment{The letter '\n'.}
9005 \endsetslot
9006
9007 \setslot{\lctop{Ncaron}{ncaron}}
9008   \comment{The letter '\v n'.}
9009 \endsetslot
9010
9011 \setslot{\lc{Eng}{eng}}
9012   \comment{The Sami letter '\ng'.
9013   It is unavailable in \plain\ \TeX.
9014   This needs to be called 'Eng'/'eng' rather than 'Ng'/'ng' as it is in
9015   t1.etc in most cases, it seems.}
9016 \endsetslot
9017
9018 \setslot{\lctop{Ohungarumlaut}{ohungarumlaut}}
9019   \comment{The letter '\H o'.}
9020 \endsetslot
9021
9022 \setslot{\lctop{Racute}{racute}}
9023   \comment{The letter '\r'.}
9024 \endsetslot
9025
9026 \setslot{\lctop{Rcaron}{rcaron}}

```

```

9027     \comment{The letter '\v r'.}
9028 \endsetslot
9029
9030 \setslot{\lctop{Sacute}{sacute}}
9031     \comment{The letter '\s' .}
9032 \endsetslot
9033
9034 \setslot{\lctop{Scaron}{scaron}}
9035     \comment{The letter '\v s' .}
9036 \endsetslot
9037
9038 \setslot{\lc{Scedilla}{scedilla}}
9039     \comment{The letter '\c s' .}
9040 \endsetslot
9041
9042 \setslot{\lctop{Tcaron}{tcaron}}
9043     \comment{The letter '\v t' .}
9044 \endsetslot
9045
9046 \setslot{\lc{Tcedilla}{tcedilla}}
9047     \comment{The letter '\c t' .}
9048 \endsetslot
9049
9050 \setslot{\lctop{Uhngarumlaut}{uhngarumlaut}}
9051     \comment{The letter '\H u' .}
9052 \endsetslot
9053
9054 \setslot{\lctop{Uring}{uring}}
9055     \comment{The letter '\r u' .}
9056 \endsetslot
9057
9058 \setslot{\lctop{Ydieresis}{ydiere}}
9059     \comment{The letter '\y' .}
9060 \endsetslot
9061
9062 \setslot{\lctop{Zacute}{zacute}}
9063     \comment{The letter '\z' .}
9064 \endsetslot
9065
9066 \setslot{\lctop{Zcaron}{zcaron}}
9067     \comment{The letter '\v z' .}
9068 \endsetslot
9069
9070 \setslot{\lctop{Zdotaccent}{zdotaccent}}
9071     \comment{The letter '\. z' .}
9072 \endsetslot
9073
9074 \ifnumber{\int{ligaturing}}<0\then \skipslots{1}\Else
9075
9076     \setslot{\lclig{IJ}{ij}}
9077     \comment{The letter 'ij'. This is a single letter, and in a
9078         monowidth font should ideally be one letter wide.}
9079 \endsetslot
9080

```

```
9081 \Fi
9082
9083 \setslot{exclamdown}
9084     \comment{The Spanish punctuation mark '!'.}
9085 \endsetslot
9086
9087 \setslot{questiondown}
9088     \comment{The Spanish punctuation mark '?'.}
9089 \endsetslot
9090
9091 \setslot{sterling}
9092     \comment{The British currency mark '\textsterling'.}
9093 \endsetslot
9094
9095 \setslot{\uctop{Agrave}{agrave}}
9096     \comment{The letter '\` A'.}
9097 \endsetslot
9098
9099 \setslot{\uctop{Aacute}{aacute}}
9100     \comment{The letter '\^ A'.}
9101 \endsetslot
9102
9103 \setslot{\uctop{Acircumflex}{acircumflex}}
9104     \comment{The letter '\~ A'.}
9105 \endsetslot
9106
9107 \setslot{\uctop{Atilde}{atilde}}
9108     \comment{The letter '\~\~ A'.}
9109 \endsetslot
9110
9111 \setslot{\uctop{Adieresis}{adieresis}}
9112     \comment{The letter '\\" A'.}
9113 \endsetslot
9114
9115 \setslot{\uctop{Aring}{aring}}
9116     \comment{The letter '\r A'.}
9117 \endsetslot
9118
9119 \setslot{\uc{AE}{ae}}
9120     \comment{The letter '\AE'. This is a single letter, and should not be
9121         faked with 'AE'.}
9122 \endsetslot
9123
9124 \setslot{\uc{Ccedilla}{ccedilla}}
9125     \comment{The letter '\c C'.}
9126 \endsetslot
9127
9128 \setslot{\uctop{Egrave}{egrave}}
9129     \comment{The letter '\` E'.}
9130 \endsetslot
9131
9132 \setslot{\uctop{Eacute}{eacute}}
9133     \comment{The letter '\^ E'.}
9134 \endsetslot
```

```
9135 \setslot{\uctop{Ecircumflex}{ecircumflex}}
9136   \comment{The letter '\^ E'.}
9137 \endsetslot
9138
9139 \setslot{\uctop{Edieresis}{edieresis}}
9140   \comment{The letter '\" E'.}
9141 \endsetslot
9142
9143 \setslot{\uctop{Igrave}{igrave}}
9144   \comment{The letter '\` I'.}
9145 \endsetslot
9146
9147 \setslot{\uctop{Iacute}{iacute}}
9148   \comment{The letter '\' I'.}
9149 \endsetslot
9150
9151 \setslot{\uctop{Icircumflex}{icircumflex}}
9152   \comment{The letter '\^ I'.}
9153 \endsetslot
9154
9155 \setslot{\uctop{Idieresis}{idieresis}}
9156   \comment{The letter '\" I'.}
9157 \endsetslot
9158
9159 \setslot{\uc{Eth}{eth}}
9160   \comment{The uppercase Icelandic letter 'Eth' similar to a 'D'
9161       with a horizontal bar through the stem. It is unavailable
9162       in \plain\ \TeX.}
9163 \endsetslot
9164
9165 \setslot{\uctop{Ntilde}{ntilde}}
9166   \comment{The letter '\~ N'.}
9167 \endsetslot
9168
9169 \setslot{\uctop{Ograve}{ograve}}
9170   \comment{The letter '\` O'.}
9171 \endsetslot
9172
9173 \setslot{\uctop{Oacute}{oacute}}
9174   \comment{The letter '\' O'.}
9175 \endsetslot
9176
9177 \setslot{\uctop{Ocircumflex}{ocircumflex}}
9178   \comment{The letter '\^ O'.}
9179 \endsetslot
9180
9181 \setslot{\uctop{Otilde}{otilde}}
9182   \comment{The letter '\~ O'.}
9183 \endsetslot
9184
9185 \setslot{\uctop{Odieresis}{odieresis}}
9186   \comment{The letter '\" O'.}
9187 \endsetslot
9188
```

```

9189 \setslot{\uc{OE}{oe}}
9190   \comment{The letter '\OE'. This is a single letter, and should not be
9191     faked with 'OE'.}
9192 \endsetslot
9193
9194 \setslot{\uc{0slash}{oslash}}
9195   \comment{The letter '\O'.}
9196 \endsetslot
9197
9198 \setslot{\uctop{Ugrave}{ugrave}}
9199   \comment{The letter '\` U'.}
9200 \endsetslot
9201
9202 \setslot{\uctop{Uacute}{uacute}}
9203   \comment{The letter '\^ U'.}
9204 \endsetslot
9205
9206 \setslot{\uctop{Ucircumflex}{ucircumflex}}
9207   \comment{The letter '\^ U'.}
9208 \endsetslot
9209
9210 \setslot{\uctop{Udieresis}{udieresis}}
9211   \comment{The letter '\\" U'.}
9212 \endsetslot
9213
9214 \setslot{\uctop{Yacute}{yacute}}
9215   \comment{The letter '\^ Y'.}
9216 \endsetslot
9217
9218 \setslot{\uc{Thorn}{thorn}}
9219   \comment{The Icelandic capital letter Thorn, similar to a 'P'
9220     with the bowl moved down. It is unavailable in \plain\ \TeX.}
9221 \endsetslot
9222
9223 \setslot{\uclig{SS}{germandbls}}
9224   \comment{The ligature 'SS', used to give an upper case '\ss'.
9225     In a monowidth font it should be two letters wide.}
9226 \endsetslot
9227
9228 \setslot{\lctop{Agrave}{agrave}}
9229   \comment{The letter '\` a'.}
9230 \endsetslot
9231
9232 \setslot{\lctop{Aacute}{aacute}}
9233   \comment{The letter '\^ a'.}
9234 \endsetslot
9235
9236 \setslot{\lctop{Acircumflex}{acircumflex}}
9237   \comment{The letter '\^ a'.}
9238 \endsetslot
9239
9240 \setslot{\lctop{Atilde}{atilde}}
9241   \comment{The letter '\~ a'.}
9242

```

```
9243 \endsetslot
9244
9245 \setslot{\lctop{Adieresis}{adieresis}}
9246     \comment{The letter '\a'.}
9247 \endsetslot
9248
9249 \setslot{\lctop{Aring}{aring}}
9250     \comment{The letter '\r a'.}
9251 \endsetslot
9252
9253 \setslot{\lc{AE}{ae}}
9254     \comment{The letter '\ae'. This is a single letter, and should not be
9255         faked with 'ae'.}
9256 \endsetslot
9257
9258 \setslot{\lc{Ccedilla}{ccedilla}}
9259     \comment{The letter '\c c'.}
9260 \endsetslot
9261
9262 \setslot{\lctop{Egrave}{egrave}}
9263     \comment{The letter '\e'.}
9264 \endsetslot
9265
9266 \setslot{\lctop{Eacute}{eacute}}
9267     \comment{The letter '\`e'.}
9268 \endsetslot
9269
9270 \setslot{\lctop{Ecircumflex}{ecircumflex}}
9271     \comment{The letter '\^e'.}
9272 \endsetslot
9273
9274 \setslot{\lctop{Edieresis}{edieresis}}
9275     \comment{The letter '\u00e8'.}
9276 \endsetslot
9277
9278 \setslot{\lctop{Igrave}{igrave}}
9279     \comment{The letter '\i'.}
9280 \endsetslot
9281
9282 \setslot{\lctop{Iacute}{iacute}}
9283     \comment{The letter '\i'.}
9284 \endsetslot
9285
9286 \setslot{\lctop{Icircumflex}{icircumflex}}
9287     \comment{The letter '\^i'.}
9288 \endsetslot
9289
9290 \setslot{\lctop{Idieresis}{idieresis}}
9291     \comment{The letter '\u00e9'.}
9292 \endsetslot
9293
9294 \setslot{\lc{Eth}{eth}}
9295     \comment{The Icelandic lowercase letter 'eth' similar to
9296         a '$\partial$' with an oblique bar through the stem.}
```

```
9297     It is unavailable in \plain\ \TeX.}
9298 \endsetslot
9299
9300 \setslot{\lctop{Ntilde}{ntilde}}
9301   \comment{The letter '\~ n'.}
9302 \endsetslot
9303
9304 \setslot{\lctop{Ograve}{ograve}}
9305   \comment{The letter '\` o'.}
9306 \endsetslot
9307
9308 \setslot{\lctop{Oacute}{oacute}}
9309   \comment{The letter '\^ o'.}
9310 \endsetslot
9311
9312 \setslot{\lctop{Ocircumflex}{ocircumflex}}
9313   \comment{The letter '\^ o'.}
9314 \endsetslot
9315
9316 \setslot{\lctop{Otilde}{otilde}}
9317   \comment{The letter '\~ o'.}
9318 \endsetslot
9319
9320 \setslot{\lctop{Odieresis}{odieresis}}
9321   \comment{The letter '\u00fao'.}
9322 \endsetslot
9323
9324 \setslot{\lc{OE}{oe}}
9325   \comment{The letter '\oe'. This is a single letter, and should not be
9326     faked with 'oe'.}
9327 \endsetslot
9328
9329 \setslot{\lc{Oslash}{oslash}}
9330   \comment{The letter '\o'.}
9331 \endsetslot
9332
9333 \setslot{\lctop{Ugrave}{ugrave}}
9334   \comment{The letter '\` u'.}
9335 \endsetslot
9336
9337 \setslot{\lctop{Uacute}{uacute}}
9338   \comment{The letter '\^ u'.}
9339 \endsetslot
9340
9341 \setslot{\lctop{Ucircumflex}{ucircumflex}}
9342   \comment{The letter '\^ u'.}
9343 \endsetslot
9344
9345 \setslot{\lctop{Udieresis}{udieresis}}
9346   \comment{The letter '\u00fau'.}
9347 \endsetslot
9348
9349 \setslot{\lctop{Yacute}{yacute}}
9350   \comment{The letter '\^ y'.}
```

```

9351 \endsetslot
9352
9353 \setslot{\lc{Thorn}{thorn}}
9354   \comment{The Icelandic lowercase letter ‘thorn’, similar to a ‘p’
9355   with an ascender rising from the stem. It is unavailable
9356   in \plain\ \TeX.}
9357 \endsetslot
9358
9359 \setslot{\lc{SS}{germandbls}}
9360   \comment{The letter ‘\ss’.}
9361 \endsetslot
9362
9363 \endencoding

```

#### 4.3.13 t1j-f\_f.etx

**t1j-f\_f.etx** (*etx*)

```

9364 \relax
9365

```

**t1j-f\_f.etx** – install a T1-encoded roman font with oldstyle and f-ligatures named `f\_f` etc.  
 We do not need to distinguish between roman and italic in T1, hence we simply call `t1-f_f.etx` with oldstyle parameters.

```

9366
9367 \encoding
9368
9369 \setcommand\lc#1#2{#2}
9370 \setcommand\uc#1#2{#1}
9371 \setcommand\lctop#1#2{#2}
9372 \setcommand\uctop#1#2{#1}
9373 \setcommand\lclig#1#2{#2}
9374 \setcommand\uclig#1#2{#1}
9375 \setcommand\digit#1{#1oldstyle}
9376
9377 \inputetx{t1-f_f}
9378
9379 \endencoding

```

#### 4.3.14 ts1-dotinf.etx

**ts1-dotinf.etx** (*etx*)

```

9380 %%
9381 %% - The commentary in the original is deleted in this version. For
9382 %% information about the TS1 etc., typeset the original ts1.etx
9383 %% included with fontinst.
9384 %% - The original notices at the top of that file concerning authors,
9385 %% maintenance etc. are replaced by this notice.
9386 %% - The file is renamed.
9387 %% - The encoding name is modified.
9388 %% - The file is modified to accommodate differences in glyph names.

```

```
9389 %% - The file may be modified for use in encoding other characters.  
9390 %%  
9391 %%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%  
9392 \relax  
9393  
9394 \encoding  
9395  
9396 \setstr{codingscheme}{TEX TEXT COMPANION 1---TS1 DOTINF}  
9397  
9398 \ifisglyph{x}\then  
9399   \setint{xheight}{\height{x}}  
9400 \else  
9401   \setint{xheight}{500}  
9402 \fi  
9403  
9404 \ifisglyph{space}\then  
9405   \setint{interword}{\width{space}}  
9406 \else\ifisglyph{i}\then  
9407   \setint{interword}{\width{i}}  
9408 \else  
9409   \setint{interword}{333}  
9410 \fi\fi  
9411  
9412 \setint{italicslant}{0}  
9413  
9414  
9415 \setint{fontdimen(1)}{\int{italicslant}} % italic slant  
9416 \setint{fontdimen(2)}{\int{interword}} % interword space  
9417 \setint{fontdimen(3)}{0} % interword stretch  
9418 \setint{fontdimen(4)}{0} % interword shrink  
9419 \setint{fontdimen(5)}{\int{xheight}} % x-height  
9420 \setint{fontdimen(6)}{1000} % quad  
9421 \setint{fontdimen(7)}{\int{interword}} % extra space after .  
9422  
9423 \nextslot{0}  
9424 \setslot{capitalgrave.inferior}  
9425   \comment{The grave accent '\capitalgrave{}', intended for use with  
9426     capital letters.}  
9427 \endsetslot  
9428  
9429 \setslot{capitalacute.inferior}  
9430   \comment{The acute accent '\capitalacute{}', intended for use with  
9431     capital letters.}  
9432 \endsetslot  
9433  
9434 \setslot{capitalcircumflex.inferior}  
9435   \comment{The circumflex accent '\capitalcircumflex{}', intended for  
9436     use with capital letters.}  
9437 \endsetslot  
9438  
9439 \setslot{capitaltilde.inferior}  
9440   \comment{The tilde accent '\capitaltilde{}', intended for use with  
9441     capital letters.}  
9442 \endsetslot
```

```

9443 \setslot{capitaldieresis.inferior}
9444   \comment{The umlaut or dieresis accent ‘\capitaldieresis{}’,
9445     intended for use with capital letters.}
9446 \endsetslot
9448
9449 \setslot{capitalhungarumlaut.inferior}
9450   \comment{The long Hungarian umlaut ‘\capitalhungarumlaut{}’,
9451     intended for use with capital letters.}
9452 \endsetslot
9453
9454 \setslot{capitalring.inferior}
9455   \comment{The ring accent ‘\capitalring{}’, intended for use with
9456     capital letters.}
9457 \endsetslot
9458
9459 \setslot{capitalcaron.inferior}
9460   \comment{The caron or h̄’a\v cek accent ‘\capitalcaron{}’, intended
9461     for use with capital letters.}
9462 \endsetslot
9463
9464 \setslot{capitalbreve.inferior}
9465   \comment{The breve accent ‘\capitalbreve{}’, intended for use with
9466     capital letters.}
9467 \endsetslot
9468
9469 \setslot{capitalmacron.inferior}
9470   \comment{The macron accent ‘\capitalmacron{}’, intended for use with
9471     capital letters.}
9472 \endsetslot
9473
9474 \setslot{capitaldotaccent.inferior}
9475   \comment{The dot accent ‘\capitaldotaccent{}’, intended for use with
9476     capital letters.}
9477 \endsetslot
9478
9479 \setslot{cedilla.inferior}
9480   \comment{The cedilla accent ‘\capitalcedilla{}’, intended for use
9481     with capital letters.}
9482 \endsetslot
9483
9484 \setslot{ogonek.inferior}
9485   \comment{The ogonek accent ‘\capitalogonek{}’, intended for use with
9486     capital letters.}
9487 \endsetslot
9488
9489 \nextslot{13}
9490 \setslot{quotesinglbase.inferior}
9491   \comment{A straight single quote mark on the baseline,
9492     ‘\textquotestraightbase’.}
9493 \endsetslot
9494
9495 \nextslot{18}
9496 \setslot{quotedblbase.inferior}

```

```

9497     \comment{A straight double quote mark on the baseline,
9498         '\textquotestraightdblbase'.}
9499 \endsetslot
9500
9501 \nextslot{21}
9502 \setslot{twelveudash.inferior}
9503     \comment{A 2/3-em dash, '\texttwelveudash'.}
9504 \endsetslot
9505
9506 \setslot{threequartersemdash.inferior}
9507     \comment{A 3/4-em dash, '\textthreequartersemdash'.}
9508 \endsetslot
9509
9510 \nextslot{23}
9511 \setslot{capitalcompwordmark.inferior}
9512     \comment{An invisible glyph, with zero width and depth, but the
9513         height of capital letters.
9514         It is used to stop ligaturing in words like 'shelf{}ful'.}
9515 \endsetslot
9516
9517 \nextslot{24}
9518 \setslot{arrowleft.inferior}
9519     \comment{A left pointing arrow, '\textleftarrow', unavailable in
9520         most PostScript fonts.}
9521 \endsetslot
9522
9523 \setslot{arrowright.inferior}
9524     \comment{A right pointing arrow, '\rightarrow', unavailable in
9525         most PostScript fonts.}
9526 \endsetslot
9527
9528 \nextslot{26}
9529 \setslot{tieaccentlowercase.inferior}
9530     \comment{The original tie accent '\t{}', intended for use with
9531         lowercase letters.}
9532 \endsetslot
9533
9534 \setslot{tieaccentcapital.inferior}
9535     \comment{The tie accent '\capitaltie{}', intended for use with
9536         capital letters.}
9537 \endsetslot
9538
9539 \setslot{newtieaccentlowercase.inferior}
9540     \comment{A new tie accent '\newtie{}', intended for use with
9541         lowercase letters.}
9542 \endsetslot
9543
9544 \setslot{newtieaccentcapital.inferior}
9545     \comment{A new tie accent '\capitalnewtie{}', intended for use
9546         with capital letters.}
9547 \endsetslot
9548
9549 \nextslot{31}
9550 \setslot{ascendercompwordmark.inferior}

```

```
9551     \comment{An invisible glyph, with zero width and depth, but the
9552         height of lowercase letters with ascenders.
9553         It is used to stop ligaturing in words like ‘shelf{}ful’.}
9554 \endsetslot
9555
9556 \nextslot{32}
9557 \setslot{blank.inferior}
9558     \comment{The blank indicator ‘\textblank’, similar to the letter ‘b’
9559         with an oblique bar through the stem.}
9560 \endsetslot
9561
9562 \nextslot{36}
9563 \setslot{dollar.inferior}
9564     \comment{The dollar sign ‘\textdollar’.}
9565 \endsetslot
9566
9567 \nextslot{39}
9568 \setslot{quotesingle.inferior}
9569     \comment{A straight single quote mark, ‘\textquotesingle’.}
9570 \endsetslot
9571
9572 \nextslot{42}
9573 \setslot{asteriskcentered.inferior}
9574     \comment{The centered asterisk, ‘\textasteriskcentered’.}
9575 \endsetslot
9576
9577 \nextslot{44}
9578 \setslot{comma.inferior}
9579     \comment{The decimal comma ‘,’.}
9580 \endsetslot
9581
9582 \nextslot{45}
9583 \setslot{hyphendbl.inferior}
9584     \comment{An alternate double hyphen, ‘\textdblhyphen’.}
9585 \endsetslot
9586
9587 \nextslot{46}
9588 \setslot{period.inferior}
9589     \comment{The decimal point ‘.’.}
9590 \endsetslot
9591
9592 \nextslot{47}
9593 \setslot{fraction.inferior}
9594     \comment{The fraction slash ‘\textfractionsolidus’.}
9595 \endsetslot
9596
9597 \nextslot{48}
9598 \setslot{zerooldstyle.inferior}
9599     \comment{The oldstyle number ‘\oldstylenums{0}’.}
9600 \endsetslot
9601
9602 \setslot{oneoldstyle.inferior}
9603     \comment{The oldstyle number ‘\oldstylenums{1}’.}
9604 \endsetslot
```

```
9605 \setslot{twooldstyle.inferior}
9606   \comment{The oldstyle number '\oldstylenums{2}'.}
9607 \endsetslot
9608
9609 \setslot{threeoldstyle.inferior}
9610   \comment{The oldstyle number '\oldstylenums{3}'.}
9611 \endsetslot
9612
9613 \setslot{fouroldstyle.inferior}
9614   \comment{The oldstyle number '\oldstylenums{4}'.}
9615 \endsetslot
9616
9617 \setslot{fiveoldstyle.inferior}
9618   \comment{The oldstyle number '\oldstylenums{5}'.}
9619 \endsetslot
9620
9621 \setslot{sixoldstyle.inferior}
9622   \comment{The oldstyle number '\oldstylenums{6}'.}
9623 \endsetslot
9624
9625 \setslot{sevenoldstyle.inferior}
9626   \comment{The oldstyle number '\oldstylenums{7}'.}
9627 \endsetslot
9628
9629 \setslot{eightoldstyle.inferior}
9630   \comment{The oldstyle number '\oldstylenums{8}'.}
9631 \endsetslot
9632
9633 \setslot{nineoldstyle.inferior}
9634   \comment{The oldstyle number '\oldstylenums{9}'.}
9635 \endsetslot
9636
9637 \nextslot{60}
9638 \setslot{angbracketleft.inferior}
9639   \comment{The opening angle bracket '\textlangle', unavailable in
9640     most PostScript fonts.}
9641 \endsetslot
9642
9643 \nextslot{61}
9644 \setslot{minus.inferior}
9645   \comment{The subtraction sign '\textminus'.}
9646 \endsetslot
9647
9648 \nextslot{62}
9649 \setslot{angbracketright.inferior}
9650   \comment{The closing angle bracket '\textrangle', unavailable in
9651     most PostScript fonts.}
9652 \endsetslot
9653
9654 \nextslot{77}
9655 \setslot{Omegainv.inferior}
9656   \comment{The inverted Ohm sign '\textmho', unavailable in most fonts.}
9657 \endsetslot
9658
```

```
9659 \nextslot{79}
9660   \comment{A circle ‘\textbigcircle’, big enough to enclose a letter
9661     as in ‘\textcopyright’ or ‘\textregistered’.}
9662   \setslot{bigcircle.inferior}
9663 \endsetslot
9664
9665
9666 \nextslot{87}
9667 \setslot{0mega.inferior}
9668   \comment{The upright Ohm sign ‘\textohm’, unavailable in most fonts.
9669     Even if it is available in Mac-encoded fonts, it isn’t directly
9670     accessible in the 8r or 8y encodings.}
9671 \endsetslot
9672
9673 \nextslot{91}
9674 \setslot{openbracketleft.inferior}
9675   \comment{The opening double square bracket ‘\textlbrackdbl’,
9676     unavailable in most PostScript fonts.}
9677 \endsetslot
9678
9679 \nextslot{93}
9680 \setslot{openbracketright.inferior}
9681   \comment{The closing double square bracket ‘\textrbrackdbl’,
9682     unavailable in most PostScript fonts.}
9683 \endsetslot
9684
9685 \nextslot{94}
9686 \setslot{arrowup.inferior}
9687   \comment{An upwards pointing arrow ‘\textuparrow’, unavailable in
9688     most PostScript fonts.}
9689 \endsetslot
9690
9691 \nextslot{95}
9692 \setslot{arrowdown.inferior}
9693   \comment{An downwards pointing arrow ‘\textdownarrow’, unavailable
9694     in most PostScript fonts.}
9695 \endsetslot
9696
9697 \nextslot{96}
9698 \setslot{asciigrave.inferior}
9699   \comment{An ASCII-style grave ‘\textasciigrave’. This is supposed
9700     to be a character by itself rather than a combining accents.}
9701 \endsetslot
9702
9703 \nextslot{98}
9704 \setslot{born.inferior}
9705   \comment{The born symbol ‘\textborn’, unavailable in most PostScript
9706     fonts.}
9707 \endsetslot
9708
9709 \nextslot{99}
9710 \setslot{divorced.inferior}
9711   \comment{The divorced symbol ‘\textdivorced’, unavailable in most
9712     PostScript fonts.}
```

```
9713 \endsetslot
9714
9715 \nextslot{100}
9716 \setslot{died.inferior}
9717   \comment{The died symbol ‘\textdied’, unavailable in most PostScript
9718     fonts.}
9719 \endsetslot
9720
9721 \nextslot{108}
9722 \setslot{leaf.inferior}
9723   \comment{The leaf symbol ‘\textleaf’, unavailable in most PostScript
9724     fonts.}
9725 \endsetslot
9726
9727 \nextslot{109}
9728 \setslot{married.inferior}
9729   \comment{The married symbol ‘\textmarried’, unavailable in most
9730     PostScript fonts.}
9731 \endsetslot
9732
9733 \nextslot{110}
9734 \setslot{musicalnote.inferior}
9735   \comment{A musical note symbol ‘\textmusicalnote’, unavailable in
9736     most PostScript fonts.}
9737 \endsetslot
9738
9739 \nextslot{126}
9740 \setslot{tildelow.inferior}
9741   \comment{A lowered tilde ‘\texttildelow’. In most PostScript fonts
9742     it can be substituted by ‘asciitilde’, while ‘\textasciitilde’
9743     is supposed to be a raised ‘tilde’.}
9744 \endsetslot
9745
9746 \nextslot{127}
9747 \setslot{hyphendblchar.inferior}
9748   \comment{The glyph used for hyphenation in this font, which will
9749     almost always be the same as ‘hyphendbl’.}
9750 \endsetslot
9751
9752 \nextslot{128}
9753 \setslot{asciibreve.inferior}
9754   \comment{An ASCII-style breve ‘\textasciibreve’. This is supposed
9755     to be a character by itself rather than a combining accents.}
9756 \endsetslot
9757
9758 \setslot{asciicaron.inferior}
9759   \comment{An ASCII-style caron ‘\textasciicaron’. This is supposed
9760     to be a character by itself rather than a combining accents.}
9761 \endsetslot
9762
9763 \setslot{asciiauctedbl.inferior}
9764   \comment{An ASCII-style double tick mark, ‘\textacutedbl’.}
9765 \endsetslot
9766
```

```
9767 \setslot{asciigravedbl.inferior}
9768     \comment{An ASCII-style double backtick mark, '\textgravedbl'.}
9769 \endsetslot
9770
9771 \setslot{dagger.inferior}
9772     \comment{The single dagger '\textdagger'.}
9773 \endsetslot
9774
9775 \setslot{daggerdbl.inferior}
9776     \comment{The double dagger '\textdaggerdbl'.}
9777 \endsetslot
9778
9779 \setslot{bardbl.inferior}
9780     \comment{The double vertical bar '\textbardbl'.}
9781 \endsetslot
9782
9783 \setslot{perthousand.inferior}
9784     \comment{The perthousand sign '\textperthousand'.}
9785 \endsetslot
9786
9787 \setslot{bullet.inferior}
9788     \comment{The centered bullet '\textbullet'.}
9789 \endsetslot
9790
9791 \setslot{centigrade.inferior}
9792     \comment{The degree centigrade symbol '\textcelsius'.}
9793 \endsetslot
9794
9795 \setslot{dollaroldstyle.inferior}
9796     \comment{An oldstyle dollar sign '\textdollaroldstyle'.}
9797 \endsetslot
9798
9799 \setslot{centoldstyle.inferior}
9800     \comment{An oldstyle cent sign '\textcentoldstyle'.}
9801 \endsetslot
9802
9803 \setslot{florin.inferior}
9804     \comment{The florin sign '\textflorin'.}
9805 \endsetslot
9806
9807 \setslot{colonmonetary.inferior}
9808     \comment{The Colon currency sign '\textcolonmonetary', similar to
9809         a capital 'C' with a vertical bar through the middle.}
9810 \endsetslot
9811
9812 \setslot{won.inferior}
9813     \comment{The Won currency sign '\textwon', similar to a capital 'W'
9814         with two horizontal bars.}
9815 \endsetslot
9816
9817 \setslot{naira.inferior}
9818     \comment{The Naira currency sign '\textnaira', similar to a
9819         capital 'N' with two horizontal bars.}
9820 \endsetslot
```

```
9821 \setslot{guarani.inferior}
9822   \comment{The Guarani currency sign ‘\textguarani’, similar to
9823     a capital ‘G’ with a vertical bar through the middle.}
9824 \endsetslot
9826
9827 \setslot{peso.inferior}
9828   \comment{The Peso currency sign ‘\textpeso’, similar to a capital ‘P’
9829     with a horizontal bar through the bowl or below the bowl.}
9830 \endsetslot
9831
9832 \setslot{lira.inferior}
9833   \comment{The Lira currency sign ‘\textlira’, similar to a sterlina
9834     sign ‘\textsterling’ with two horizontal bars.}
9835 \endsetslot
9836
9837 \setslot{recipe.inferior}
9838   \comment{The recipe symbol ‘\textrecipe’, similar to a capital ‘R’
9839     with an oblique bar through the tail.}
9840 \endsetslot
9841
9842 \setslot{interrobang.inferior}
9843   \comment{The interrobang symbol ‘\textinterrobang’, similar to
9844     a combination of an exclamation mark and a question mark.}
9845 \endsetslot
9846
9847 \setslot{interrobangdown.inferior}
9848   \comment{The inverted interrobang symbol ‘\textinterrobangdown’,
9849     similar to a combination of an inverted exclamation mark
9850     and an inverted question mark.}
9851 \endsetslot
9852
9853 \setslot{dong.inferior}
9854   \comment{The Dong currency sign ‘\textdong’, similar to a lowercase
9855     ‘d’ with a horizontal bar through the stem and another bar below
9856     the letter.}
9857 \endsetslot
9858
9859 \setslot{trademark.inferior}
9860   \comment{The trademark sign ‘\texttrademark’, similar to the raised
9861     letters ‘TM’.}
9862 \endsetslot
9863
9864 \setslot{pertenthousand.inferior}
9865   \comment{The pertenthousand sign ‘\textpertenthousand’, unavailable
9866     in most PostScript fonts.}
9867 \endsetslot
9868
9869 \setslot{pilcrow.inferior}
9870   \comment{The pilcrow mark ‘\textpilcrow’, similar to a paragraph
9871     mark ‘\textparagraph’ with a single stem.}
9872 \endsetslot
9873
9874 \setslot{baht.inferior}
```

```
9875     \comment{The Baht currency sign ‘\textbaht’, similar to a capital ‘B’
9876         with a vertical bar through the middle.}
9877 \endsetslot
9878
9879 \setslot{numero.inferior}
9880     \comment{The numero sign ‘\textnumero’, similar to the letter ‘N’
9881         with a raised ‘o’, unavailable in most PostScript fonts.}
9882 \endsetslot
9883
9884 \setslot{discount.inferior}
9885     \comment{The discount sign ‘\textdiscount’, similar to a stylized
9886         percent sign, unavailable in most PostScript fonts.}
9887 \endsetslot
9888
9889 \setslot{estimated.inferior}
9890     \comment{The estimated sign ‘\textestimated’, similar to an enlarged
9891         lowercase ‘e’, unavailable in most PostScript fonts.}
9892 \endsetslot
9893
9894 \setslot{openbullet.inferior}
9895     \comment{The centered open bullet ‘\textopenbullet’, unavailable
9896         in most PostScript fonts.}
9897 \endsetslot
9898
9899 \setslot{servicemark.inferior}
9900     \comment{The service mark sign ‘\textservicemark’, similar to the
9901         raised letters ‘SM’, unavailable in most PostScript fonts.}
9902 \endsetslot
9903
9904 \nextslot{160}
9905 \setslot{quillbracketleft.inferior}
9906     \comment{The opening quill bracket ‘\textlquill’, unavailable in
9907         most PostScript fonts.}
9908 \endsetslot
9909
9910 \setslot{quillbracketright.inferior}
9911     \comment{The closing quill bracket ‘\textrquill’, unavailable in
9912         most PostScript fonts.}
9913 \endsetslot
9914
9915 \setslot{cent.inferior}
9916     \comment{The cent sign ‘\textcent’.}
9917 \endsetslot
9918
9919 \setslot{sterling.inferior}
9920     \comment{The British currency sign, ‘\textsterling’.}
9921 \endsetslot
9922
9923 \setslot{currency.inferior}
9924     \comment{The international currency sign, ‘\textcurrency’.}
9925 \endsetslot
9926
9927 \setslot{yen.inferior}
9928     \comment{The Japanese currency sign, ‘\textyen’.}
```

```
9929 \endsetslot
9930
9931 \setslot{brokenbar.inferior}
9932     \comment{A broken vertical bar, ‘\textbrokenbar’, similar to
9933         ‘\textbar’ with a gap through the middle.}
9934 \endsetslot
9935
9936 \setslot{section.inferior}
9937     \comment{The section mark ‘\textsection’.}
9938 \endsetslot
9939
9940 \setslot{asciidieresis.inferior}
9941     \comment{An ASCII-style dieresis ‘\textasciidieresis’. This is
9942         supposed to be character by itself rather than an accents.}
9943 \endsetslot
9944
9945 \setslot{copyright.inferior}
9946     \comment{The copyright sign ‘\textcopyright’, similar to a small
9947         letter ‘C’ enclosed by a circle.}
9948 \endsetslot
9949
9950 \setslot{ordfeminine.inferior}
9951     \comment{The raised letter ‘\textordfeminine’.}
9952 \endsetslot
9953
9954 \setslot{copyleft.inferior}
9955     \comment{The reversed copyright sign ‘\textcopyleft’, similar to
9956         a small reversed ‘C’ enclosed by a circle.}
9957 \endsetslot
9958
9959 \setslot{logicalnot.inferior}
9960     \comment{The logical not sign ‘\textlnot’.}
9961 \endsetslot
9962
9963 \setslot{circledP.inferior}
9964     \comment{A small letter ‘P’ enclosed by a circle, ‘\textcircledP’,
9965         unavailable in most fonts.}
9966 \endsetslot
9967
9968 \setslot{registered.inferior}
9969     \comment{The registered trademark sign ‘\textregistered’, similar to
9970         a small letter ‘R’ enclosed by a circle.}
9971 \endsetslot
9972
9973 \setslot{asciimacron.inferior}
9974     \comment{An ASCII-style macron ‘\textasciimacron’. This is supposed
9975         to be a character by itself rather than a combining accents.}
9976 \endsetslot
9977
9978 \setslot{degree.inferior}
9979     \comment{The degree sign ‘\textdegree’.}
9980 \endsetslot
9981
9982 \setslot{plusminus.inferior}
```

```
9983     \comment{The plus or minus sign ‘\textpm’.}
9984 \endsetslot
9985
9986 \setslot{two.superior}
9987     \comment{The raised digit ‘\texttwosuperior’.}
9988 \endsetslot
9989
9990 \setslot{three.superior}
9991     \comment{The raised digit ‘\textthreesuperior’.}
9992 \endsetslot
9993
9994 \setslot{asciiacute.inferior}
9995     \comment{An ASCII-style acute ‘\textasciacute’. This is supposed
9996         to be a character by itself rather than a combining accents.}
9997 \endsetslot
9998
9999 \setslot{mu.inferior}
10000     \comment{The lowercase Greek letter ‘\textmu’, intended for use as
10001         a prefix ‘micro’ in physical units.}
10002 \endsetslot
10003
10004 \setslot{paragraph.inferior}
10005     \comment{The paragraph mark ‘\textparagraph’.}
10006 \endsetslot
10007
10008 \setslot{periodcentered.inferior}
10009     \comment{The centered period ‘\textperiodcentered’.}
10010 \endsetslot
10011
10012 \setslot{referencemark.inferior}
10013     \comment{The reference mark ‘\textreferencemark’, similar to
10014         a combination of the ‘multiply’ and ‘divide’ symbols.}
10015 \endsetslot
10016
10017 \setslot{one.superior}
10018     \comment{The raised digit ‘\textonesuperior’.}
10019 \endsetslot
10020
10021 \setslot{ordmasculine.inferior}
10022     \comment{The raised letter ‘\textordmasculine’.}
10023 \endsetslot
10024
10025 \setslot{radical.inferior}
10026     \comment{The radical sign ‘\textsurd’, unavailable in most fonts.
10027         Even if it is available in Mac-encoded fonts, it isn’t directly
10028         accessible in the 8r or 8y encodings.}
10029 \endsetslot
10030
10031 \setslot{onequarter.inferior}
10032     \comment{The fraction ‘\textonequarter’.}
10033 \endsetslot
10034
10035 \setslot{onehalf.inferior}
10036     \comment{The fraction ‘\textonehalf’.}
```

```

10037 \endsetslot
10038
10039 \setslot{threequarters.inferior}
10040   \comment{The fraction '\textthreequarters'.}
10041 \endsetslot
10042
10043 \setslot{Euro.inferior}
10044   \comment{The European currency sign, similar to '\texteuro'.}
10045 \endsetslot
10046
10047
10048 \nextslot{214}
10049 \setslot{multiply.inferior}
10050   \comment{The multiplication sign '\texttimes'.
This symbol was originally intended to be put into slot~215,
but ended up in this slot by mistake, at which time it was
considered too late to change it.}
10054 \endsetslot
10055
10056 \nextslot{246}
10057 \setslot{divide.inferior}
10058   \comment{The division sign '\textdiv'.
This symbol was originally intended to be put into slot~247,
but ended up in this slot by mistake, at which time it was
considered too late to change it.}
10062 \endsetslot
10063
10064 \endencoding
10065

```

#### 4.3.15 ts1-dotsup.etx

*ts1-dotsup.etx (etx)*

```

10066 %%
10067 %% - The commentary in the original is deleted in this version. For
10068 %% information about the TS1 etc., typeset the original ts1.etx
10069 %% included with fontinst.
10070 %% - The original notices at the top of that file concerning authors,
10071 %% maintenance etc. are replaced by this notice.
10072 %% - The file is renamed.
10073 %% - The encoding name is modified.
10074 %% - The file is modified to accommodate differences in glyph names.
10075 %% - The file may be modified for use in encoding other characters.
10076 %%
10077 %%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%%
10078 \relax
10079
10080 \encoding
10081
10082 \setstr{codingscheme}{TEX TEXT COMPANION 1---TS1 DOTSUP}
10083
10084 \ifisglyph{x}\then

```

```

10085   \setint{xheight}{\height{x}}
10086 \else
10087   \setint{xheight}{500}
10088 \fi
10089
10090 \ifisglyph{space}\then
10091   \setint{interword}{\width{space}}
10092 \else\ifisglyph{i}\then
10093   \setint{interword}{\width{i}}
10094 \else
10095   \setint{interword}{333}
10096 \fi\fi
10097
10098 \setint{italicslant}{0}
10099
10100
10101 \setint{fontdimen(1)}{\int{italicslant}}% italic slant
10102 \setint{fontdimen(2)}{\int{interword}}% interword space
10103 \setint{fontdimen(3)}{0}% interword stretch
10104 \setint{fontdimen(4)}{0}% interword shrink
10105 \setint{fontdimen(5)}{\int{xheight}}% x-height
10106 \setint{fontdimen(6)}{1000}% quad
10107 \setint{fontdimen(7)}{\int{interword}}% extra space after .
10108
10109 \nextslot{0}
10110 \setslot{capitalgrave.superior}
10111   \comment{The grave accent '\capitalgrave{}', intended for use with
10112     capital letters.}
10113 \endsetslot
10114
10115 \setslot{capitalacute.superior}
10116   \comment{The acute accent '\capitalacute{}', intended for use with
10117     capital letters.}
10118 \endsetslot
10119
10120 \setslot{capitalcircumflex.superior}
10121   \comment{The circumflex accent '\capitalcircumflex{}', intended for
10122     use with capital letters.}
10123 \endsetslot
10124
10125 \setslot{capitaltilde.superior}
10126   \comment{The tilde accent '\capitaltilde{}', intended for use with
10127     capital letters.}
10128 \endsetslot
10129
10130 \setslot{capitaldieresis.superior}
10131   \comment{The umlaut or dieresis accent '\capitaldieresis{}',
10132     intended for use with capital letters.}
10133 \endsetslot
10134
10135 \setslot{capitalhungarumlaut.superior}
10136   \comment{The long Hungarian umlaut '\capitalhungarumlaut{}',
10137     intended for use with capital letters.}
10138 \endsetslot

```

```
10139 \setslot{capitalring.superior}
10140   \comment{The ring accent '\capitalring{}', intended for use with
10141     capital letters.}
10142   \endsetslot
10143
10144 \setslot{capitalcaron.superior}
10145   \comment{The caron or h'a\v cek accent '\capitalcaron{}', intended
10146     for use with capital letters.}
10147   \endsetslot
10148
10149 \setslot{capitalbreve.superior}
10150   \comment{The breve accent '\capitalbreve{}', intended for use with
10151     capital letters.}
10152   \endsetslot
10153
10154 \setslot{capitalmacron.superior}
10155   \comment{The macron accent '\capitalmacron{}', intended for use with
10156     capital letters.}
10157   \endsetslot
10158
10159 \setslot{capitaldotaccent.superior}
10160   \comment{The dot accent '\capitaldotaccent{}', intended for use with
10161     capital letters.}
10162   \endsetslot
10163
10164 \setslot{cedilla.superior}
10165   \comment{The cedilla accent '\capitalcedilla{}', intended for use
10166     with capital letters.}
10167   \endsetslot
10168
10169 \setslot{ogonek.superior}
10170   \comment{The ogonek accent '\capitalogonek{}', intended for use with
10171     capital letters.}
10172   \endsetslot
10173
10174 \nextslot{13}
10175 \setslot{quotesinglbase.superior}
10176   \comment{A straight single quote mark on the baseline,
10177     '\textquotestraightbase'.}
10178   \endsetslot
10179
10180 \nextslot{18}
10181 \setslot{quotedblbase.superior}
10182   \comment{A straight double quote mark on the baseline,
10183     '\textquotestraightdblbase'.}
10184   \endsetslot
10185
10186 \nextslot{21}
10187 \setslot{twelveudash.superior}
10188   \comment{A 2/3~em dash, '\texttwelveudash'.}
10189   \endsetslot
10190
10191 \setslot{threequartersemdash.superior}
```

```

10193   \comment{A 3/4~em dash, '\textthreequartersemdash'.}
10194   \endsetslot
10195
10196   \nextslot{23}
10197   \setslot{capitalcompwordmark.superior}
10198     \comment{An invisible glyph, with zero width and depth, but the
10199       height of capital letters.
10200       It is used to stop ligaturing in words like 'shelf{}ful'.}
10201   \endsetslot
10202
10203   \nextslot{24}
10204   \setslot{arrowleft.superior}
10205     \comment{A left pointing arrow, '\textleftarrow', unavailable in
10206       most PostScript fonts.}
10207   \endsetslot
10208
10209   \setslot{arrowright.superior}
10210     \comment{A right pointing arrow, '\rightarrow', unavailable in
10211       most PostScript fonts.}
10212   \endsetslot
10213
10214   \nextslot{26}
10215   \setslot{tieaccentlowercase.superior}
10216     \comment{The original tie accent '\t{}', intended for use with
10217       lowercase letters.}
10218   \endsetslot
10219
10220   \setslot{tieaccentcapital.superior}
10221     \comment{The tie accent '\capitaltie{}', intended for use with
10222       capital letters.}
10223   \endsetslot
10224
10225   \setslot{newtieaccentlowercase.superior}
10226     \comment{A new tie accent '\newtie{}', intended for use with
10227       lowercase letters.}
10228   \endsetslot
10229
10230   \setslot{newtieaccentcapital.superior}
10231     \comment{A new tie accent '\capitalnewtie{}', intended for use
10232       with capital letters.}
10233   \endsetslot
10234
10235   \nextslot{31}
10236   \setslot{ascendercompwordmark.superior}
10237     \comment{An invisible glyph, with zero width and depth, but the
10238       height of lowercase letters with ascenders.
10239       It is used to stop ligaturing in words like 'shelf{}ful'.}
10240   \endsetslot
10241
10242   \nextslot{32}
10243   \setslot{blank.superior}
10244     \comment{The blank indicator '\textblank', similar to the letter 'b',
10245       with an oblique bar through the stem.}
10246   \endsetslot

```

```
10247 \nextslot{36}
10248 \setslot{dollar.superior}
10249   \comment{The dollar sign ‘\textdollar’.}
10250 \endsetslot
10252
10253 \nextslot{39}
10254 \setslot{quotesingle.superior}
10255   \comment{A straight single quote mark, ‘\textquotesingle’.}
10256 \endsetslot
10257
10258 \nextslot{42}
10259 \setslot{asteriskcentered.superior}
10260   \comment{The centered asterisk, ‘\textasteriskcentered’.}
10261 \endsetslot
10262
10263 \nextslot{44}
10264 \setslot{comma.superior}
10265   \comment{The decimal comma ‘,’.}
10266 \endsetslot
10267
10268 \nextslot{45}
10269 \setslot{hyphendbl.superior}
10270   \comment{An alternate double hyphen, ‘\textdblhyphen’.}
10271 \endsetslot
10272
10273 \nextslot{46}
10274 \setslot{period.superior}
10275   \comment{The decimal point ‘.’.}
10276 \endsetslot
10277
10278 \nextslot{47}
10279 \setslot{fraction.superior}
10280   \comment{The fraction slash ‘\textfractionsolidus’.}
10281 \endsetslot
10282
10283 \nextslot{48}
10284 \setslot{zerooldstyle.superior}
10285   \comment{The oldstyle number ‘\oldstylenums{0}’.}
10286 \endsetslot
10287
10288 \setslot{oneoldstyle.superior}
10289   \comment{The oldstyle number ‘\oldstylenums{1}’.}
10290 \endsetslot
10291
10292 \setslot{twooldstyle.superior}
10293   \comment{The oldstyle number ‘\oldstylenums{2}’.}
10294 \endsetslot
10295
10296 \setslot{threeoldstyle.superior}
10297   \comment{The oldstyle number ‘\oldstylenums{3}’.}
10298 \endsetslot
10299
10300 \setslot{fouroldstyle.superior}
```

```
10301     \comment{The oldstyle number '\oldstylenums{4}'.}
10302     \endsetslot
10303
10304     \setslot{fiveoldstyle.superior}
10305         \comment{The oldstyle number '\oldstylenums{5}'.}
10306     \endsetslot
10307
10308     \setslot{sixoldstyle.superior}
10309         \comment{The oldstyle number '\oldstylenums{6}'.}
10310     \endsetslot
10311
10312     \setslot{sevenoldstyle.superior}
10313         \comment{The oldstyle number '\oldstylenums{7}'.}
10314     \endsetslot
10315
10316     \setslot{eightoldstyle.superior}
10317         \comment{The oldstyle number '\oldstylenums{8}'.}
10318     \endsetslot
10319
10320     \setslot{nineoldstyle.superior}
10321         \comment{The oldstyle number '\oldstylenums{9}'.}
10322     \endsetslot
10323
10324     \nextslot{60}
10325     \setslot{angbracketleft.superior}
10326         \comment{The opening angle bracket '\textlangle', unavailable in
10327             most PostScript fonts.}
10328     \endsetslot
10329
10330     \nextslot{61}
10331     \setslot{minus.superior}
10332         \comment{The subtraction sign '\textminus'.}
10333     \endsetslot
10334
10335     \nextslot{62}
10336     \setslot{angbracketright.superior}
10337         \comment{The closing angle bracket '\textrangle', unavailable in
10338             most PostScript fonts.}
10339     \endsetslot
10340
10341     \nextslot{77}
10342     \setslot{Omegainv.superior}
10343         \comment{The inverted Ohm sign '\textmho', unavailable in most fonts.}
10344     \endsetslot
10345
10346     \nextslot{79}
10347         \comment{A circle '\textbigcircle', big enough to enclose a letter
10348             as in '\textcopyright' or '\textregistered'.}
10349     \setslot{bigcircle.superior}
10350     \endsetslot
10351
10352     \nextslot{87}
10353     \setslot{Omega.superior}
10354         \comment{The upright Ohm sign '\textohm', unavailable in most fonts.}
```

```
10355      Even if it is available in Mac-encoded fonts, it isn't directly
10356      accessible in the 8r or 8y encodings.}
10357  \endsetslot
10358
10359  \nextslot{91}
10360  \setslot{openbracketleft.superior}
10361      \comment{The opening double square bracket '\textlbrackdbl',
10362          unavailable in most PostScript fonts.}
10363  \endsetslot
10364
10365  \nextslot{93}
10366  \setslot{openbracketright.superior}
10367      \comment{The closing double square bracket '\textrbrackdbl',
10368          unavailable in most PostScript fonts.}
10369  \endsetslot
10370
10371  \nextslot{94}
10372  \setslot{arrowup.superior}
10373      \comment{An upwards pointing arrow '\textuparrow', unavailable in
10374          most PostScript fonts.}
10375  \endsetslot
10376
10377  \nextslot{95}
10378  \setslot{arrowdown.superior}
10379      \comment{An downwards pointing arrow '\textdownarrow', unavailable
10380          in most PostScript fonts.}
10381  \endsetslot
10382
10383  \nextslot{96}
10384  \setslot{asciigrave.superior}
10385      \comment{An ASCII-style grave '\textasciigrave'. This is supposed
10386          to be a character by itself rather than a combining accents.}
10387  \endsetslot
10388
10389  \nextslot{98}
10390  \setslot{born.superior}
10391      \comment{The born symbol '\textborn', unavailable in most PostScript
10392          fonts.}
10393  \endsetslot
10394
10395  \nextslot{99}
10396  \setslot{divorced.superior}
10397      \comment{The divorced symbol '\textdivorced', unavailable in most
10398          PostScript fonts.}
10399  \endsetslot
10400
10401  \nextslot{100}
10402  \setslot{died.superior}
10403      \comment{The died symbol '\textdied', unavailable in most PostScript
10404          fonts.}
10405  \endsetslot
10406
10407  \nextslot{108}
10408  \setslot{leaf.superior}
```

```
10409     \comment{The leaf symbol ‘\textleaf’, unavailable in most PostScript
10410         fonts.}
10411 \endsetslot
10412
10413 \nextslot{109}
10414 \setslot{married.superior}
10415     \comment{The married symbol ‘\textmarried’, unavailable in most
10416         PostScript fonts.}
10417 \endsetslot
10418
10419 \nextslot{110}
10420 \setslot{musicalnote.superior}
10421     \comment{A musical note symbol ‘\textmusicalnote’, unavailable in
10422         most PostScript fonts.}
10423 \endsetslot
10424
10425 \nextslot{126}
10426 \setslot{tildelow.superior}
10427     \comment{A lowered tilde ‘\texttildelow’. In most PostScript fonts
10428         it can be substituted by ‘asciitilde’, while ‘\textasciitilde’
10429         is supposed to be a raised ‘tilde’.}
10430 \endsetslot
10431
10432 \nextslot{127}
10433 \setslot{hyphendblchar.superior}
10434     \comment{The glyph used for hyphenation in this font, which will
10435         almost always be the same as ‘hyphendbl’.}
10436 \endsetslot
10437
10438 \nextslot{128}
10439 \setslot{asciibreve.superior}
10440     \comment{An ASCII-style breve ‘\textasciibreve’. This is supposed
10441         to be a character by itself rather than a combining accents.}
10442 \endsetslot
10443
10444 \setslot{asciicaron.superior}
10445     \comment{An ASCII-style caron ‘\textasciicaron’. This is supposed
10446         to be a character by itself rather than a combining accents.}
10447 \endsetslot
10448
10449 \setslot{asciiacutedbl.superior}
10450     \comment{An ASCII-style double tick mark, ‘\textacutedbl’.}
10451 \endsetslot
10452
10453 \setslot{asciigravedbl.superior}
10454     \comment{An ASCII-style double backtick mark, ‘\textgravedbl’.}
10455 \endsetslot
10456
10457 \setslot{dagger.superior}
10458     \comment{The single dagger ‘\textdagger’.}
10459 \endsetslot
10460
10461 \setslot{daggerdbl.superior}
10462     \comment{The double dagger ‘\textdaggerdbl’.}
```

```
10463 \endsetslot
10464
10465 \setslot{bardbl.superior}
10466     \comment{The double vertical bar ‘\textbardbl’.}
10467 \endsetslot
10468
10469 \setslot{perthousand.superior}
10470     \comment{The perthousand sign ‘\textperthousand’.}
10471 \endsetslot
10472
10473 \setslot{bullet.superior}
10474     \comment{The centered bullet ‘\textbullet’.}
10475 \endsetslot
10476
10477 \setslot{centigrade.superior}
10478     \comment{The degree centigrade symbol ‘\textcelsius’.}
10479 \endsetslot
10480
10481 \setslot{dollaroldstyle.superior}
10482     \comment{An oldstyle dollar sign ‘\textdollaroldstyle’.}
10483 \endsetslot
10484
10485 \setslot{centoldstyle.superior}
10486     \comment{An oldstyle cent sign ‘\textcentoldstyle’.}
10487 \endsetslot
10488
10489 \setslot{florin.superior}
10490     \comment{The florin sign ‘\textflorin’.}
10491 \endsetslot
10492
10493 \setslot{colonmonetary.superior}
10494     \comment{The Colon currency sign ‘\textcolonmonetary’, similar to
10495         a capital ‘C’ with a vertical bar through the middle.}
10496 \endsetslot
10497
10498 \setslot{won.superior}
10499     \comment{The Won currency sign ‘\textwon’, similar to a capital ‘W’
10500         with two horizontal bars.}
10501 \endsetslot
10502
10503 \setslot{naira.superior}
10504     \comment{The Naira currency sign ‘\textnaira’, similar to a
10505         capital ‘N’ with two horizontal bars.}
10506 \endsetslot
10507
10508 \setslot{guarani.superior}
10509     \comment{The Guarani currency sign ‘\textguarani’, similar to
10510         a capital ‘G’ with a vertical bar through the middle.}
10511 \endsetslot
10512
10513 \setslot{peso.superior}
10514     \comment{The Peso currency sign ‘\textpeso’, similar to a capital ‘P’
10515         with a horizontal bar through the bowl or below the bowl.}
10516 \endsetslot
```

```
10517 \setslot{lira.superior}
10518   \comment{The Lira currency sign '\textlira', similar to a sterling
10519     sign '\textsterling' with two horizontal bars.}
10520   \endsetslot
10522
10523 \setslot{recipe.superior}
10524   \comment{The recipe symbol '\textrecipe', similar to a capital 'R'
10525     with an oblique bar through the tail.}
10526 \endsetslot
10527
10528 \setslot{interrobang.superior}
10529   \comment{The interrobang symbol '\textinterrobang', similar to
10530     a combination of an exclamation mark and a question mark.}
10531 \endsetslot
10532
10533 \setslot{interrobangdown.superior}
10534   \comment{The inverted interrobang symbol '\textinterrobangdown',
10535     similar to a combination of an inverted exclamation mark
10536     and an inverted question mark.}
10537 \endsetslot
10538
10539 \setslot{dong.superior}
10540   \comment{The Dong currency sign '\textdong', similar to a lowercase
10541     'd' with a horizontal bar through the stem and another bar below
10542     the letter.}
10543 \endsetslot
10544
10545 \setslot{trademark.superior}
10546   \comment{The trademark sign '\texttrademark', similar to the raised
10547     letters 'TM'.}
10548 \endsetslot
10549
10550 \setslot{pertenthousand.superior}
10551   \comment{The pertenthousand sign '\textpertenthousand', unavailable
10552     in most PostScript fonts.}
10553 \endsetslot
10554
10555 \setslot{pilcrow.superior}
10556   \comment{The pilcrow mark '\textpilcrow', similar to a paragraph
10557     mark '\textparagraph' with a single stem.}
10558 \endsetslot
10559
10560 \setslot{baht.superior}
10561   \comment{The Baht currency sign '\textbaht', similar to a capital 'B'
10562     with a vertical bar through the middle.}
10563 \endsetslot
10564
10565 \setslot{numero.superior}
10566   \comment{The numero sign '\textnumero', similar to the letter 'N'
10567     with a raised 'o', unavailable in most PostScript fonts.}
10568 \endsetslot
10569
10570 \setslot{discount.superior}
```

```
10571     \comment{The discount sign ‘\textdiscount’, similar to a stylized
10572         percent sign, unavailable in most PostScript fonts.}
10573 \endsetslot
10574
10575 \setslot{estimated.superior}
10576     \comment{The estimated sign ‘\textestimated’, similar to an enlarged
10577         lowercase ‘e’, unavailable in most PostScript fonts.}
10578 \endsetslot
10579
10580 \setslot{openbullet.superior}
10581     \comment{The centered open bullet ‘\textopenbullet’}, unavailable
10582         in most PostScript fonts.}
10583 \endsetslot
10584
10585 \setslot{servicemark.superior}
10586     \comment{The service mark sign ‘\textservicemark’, similar to the
10587         raised letters ‘SM’, unavailable in most PostScript fonts.}
10588 \endsetslot
10589
10590 \nextslot{160}
10591 \setslot{quillbracketleft.superior}
10592     \comment{The opening quill bracket ‘\textlquill’, unavailable in
10593         most PostScript fonts.}
10594 \endsetslot
10595
10596 \setslot{quillbracketright.superior}
10597     \comment{The closing quill bracket ‘\textrquill’, unavailable in
10598         most PostScript fonts.}
10599 \endsetslot
10600
10601 \setslot{cent.superior}
10602     \comment{The cent sign ‘\textcent’.}
10603 \endsetslot
10604
10605 \setslot{sterling.superior}
10606     \comment{The British currency sign, ‘\textsterling’.}
10607 \endsetslot
10608
10609 \setslot{currency.superior}
10610     \comment{The international currency sign, ‘\textcurrency’.}
10611 \endsetslot
10612
10613 \setslot{yen.superior}
10614     \comment{The Japanese currency sign, ‘\textyen’.}
10615 \endsetslot
10616
10617 \setslot{brokenbar.superior}
10618     \comment{A broken vertical bar, ‘\textbrokenbar’, similar to
10619         ‘\textbar’ with a gap through the middle.}
10620 \endsetslot
10621
10622 \setslot{section.superior}
10623     \comment{The section mark ‘\textsection’.}
10624 \endsetslot
```

```
10625 \setslot{asciidieresis.superior}
10626   \comment{An ASCII-style dieresis '\textasciidieresis'. This is
10627     supposed to be character by itself rather than an accents.}
10628 \endsetslot
10630
10631 \setslot{copyright.superior}
10632   \comment{The copyright sign '\textcopyright', similar to a small
10633     letter 'C' enclosed by a circle.}
10634 \endsetslot
10635
10636 \setslot{ordfeminine.superior}
10637   \comment{The raised letter '\textordfeminine'.}
10638 \endsetslot
10639
10640 \setslot{copyleft.superior}
10641   \comment{The reversed copyright sign '\textcopyleft', similar to
10642     a small reversed 'C' enclosed by a circle.}
10643 \endsetslot
10644
10645 \setslot{logicalnot.superior}
10646   \comment{The logical not sign '\textlnot'.}
10647 \endsetslot
10648
10649 \setslot{circledP.superior}
10650   \comment{A small letter 'P' enclosed by a circle, '\textcircledP',
10651     unavailable in most fonts.}
10652 \endsetslot
10653
10654 \setslot{registered.superior}
10655   \comment{The registered trademark sign '\textregistered', similar to
10656     a small letter 'R' enclosed by a circle.}
10657 \endsetslot
10658
10659 \setslot{asciimacron.superior}
10660   \comment{An ASCII-style macron '\textasciimacron'. This is supposed
10661     to be a character by itself rather than a combining accents.}
10662 \endsetslot
10663
10664 \setslot{degree.superior}
10665   \comment{The degree sign '\textdegree'.}
10666 \endsetslot
10667
10668 \setslot{plusminus.superior}
10669   \comment{The plus or minus sign '\textpm'.}
10670 \endsetslot
10671
10672 \setslot{two.superior}
10673   \comment{The raised digit '\texttwosuperior'.}
10674 \endsetslot
10675
10676 \setslot{three.superior}
10677   \comment{The raised digit '\textthreesuperior'.}
10678 \endsetslot
```

```
10679 \setslot{asciiacute.superior}
10680   \comment{An ASCII-style acute ‘\textasciiacute’. This is supposed
10681       to be a character by itself rather than a combining accents.}
10682 \endsetslot
10683
10684 \setslot{mu.superior}
10685   \comment{The lowercase Greek letter ‘\textmu’, intended for use as
10686       a prefix ‘micro’ in physical units.}
10687 \endsetslot
10688
10689 \setslot{paragraph.superior}
10690   \comment{The paragraph mark ‘\textparagraph’.}
10691 \endsetslot
10692
10693 \setslot{periodcentered.superior}
10694   \comment{The centered period ‘\textperiodcentered’.}
10695 \endsetslot
10696
10697 \setslot{referencemark.superior}
10698   \comment{The reference mark ‘\textreferencemark’, similar to
10699       a combination of the ‘multiply’ and ‘divide’ symbols.}
10700 \endsetslot
10701
10702 \setslot{one.superior}
10703   \comment{The raised digit ‘\textonesuperior’.}
10704 \endsetslot
10705
10706 \setslot{ordmasculine.superior}
10707   \comment{The raised letter ‘\textordmasculine’.}
10708 \endsetslot
10709
10710 \setslot{radical.superior}
10711   \comment{The radical sign ‘\textsurd’, unavailable in most fonts.
10712       Even if it is available in Mac-encoded fonts, it isn’t directly
10713       accessible in the 8r or 8y encodings.}
10714 \endsetslot
10715
10716 \setslot{onequarter.superior}
10717   \comment{The fraction ‘\textonequarter’.}
10718 \endsetslot
10719
10720 \setslot{onehalf.superior}
10721   \comment{The fraction ‘\textonehalf’.}
10722 \endsetslot
10723
10724 \setslot{threequarters.superior}
10725   \comment{The fraction ‘\textthreequarters’.}
10726 \endsetslot
10727
10728 \setslot{Euro.superior}
10729   \comment{The European currency sign, similar to ‘\texteuro’.}
10730 \endsetslot
10731
10732
```

```

10733
10734 \nextslot{214}
10735 \setslot{multiply.superior}
10736   \comment{The multiplication sign ‘\texttimes’.
10737     This symbol was originally intended to be put into slot~215,
10738     but ended up in this slot by mistake, at which time it was
10739     considered too late to change it.}
10740 \endsetslot
10741
10742 \nextslot{246}
10743 \setslot{divide.superior}
10744   \comment{The division sign ‘\textdiv’.
10745     This symbol was originally intended to be put into slot~247,
10746     but ended up in this slot by mistake, at which time it was
10747     considered too late to change it.}
10748 \endsetslot
10749
10750 \endencoding
10751

```

#### 4.3.16 ts1-euro.etx

*ts1-euro.etx (etx)*

```

10752 %%
10753 %% - The original notices at the top of that file concerning authors,
10754 %% maintenance etc. are replaced by this notice.
10755 %% - The file is renamed.
10756 %% - The encoding is modified to accommodate euro/Euro.%
10757 %%
10758 %%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%/%
10759 \relax
10760 \encoding
10761
10762 \setstr{codingscheme}{TEX TEXT COMPANION 1---TS1 - EURO}
10763
10764 \ifisglyph{x}\then
10765   \setint{xheight}{\height{x}}
10766 \else
10767   \setint{xheight}{500}
10768 \fi
10769
10770 \ifisglyph{space}\then
10771   \setint{interword}{\width{space}}
10772 \else\ifisglyph{i}\then
10773   \setint{interword}{\width{i}}
10774 \else
10775   \setint{interword}{333}
10776 \fi\fi
10777
10778
10779 \setint{italicslant}{0}
10780

```

```

10781 \setint{fontdimen(1)}{\int{italicslant}} % italic slant
10782 \setint{fontdimen(2)}{\int{interword}} % interword space
10783 \setint{fontdimen(3)}{0} % interword stretch
10784 \setint{fontdimen(4)}{0} % interword shrink
10785 \setint{fontdimen(5)}{\int{xheight}} % x-height
10786 \setint{fontdimen(6)}{1000} % quad
10787 \setint{fontdimen(7)}{\int{interword}} % extra space after .

10789
10790
10791 \nextslot{0}
10792 \setslot{capitalgrave}
10793   \comment{The grave accent ‘\capitalgrave{}’, intended for use with
10794     capital letters.}
10795 \endsetslot
10796
10797 \setslot{capitalacute}
10798   \comment{The acute accent ‘\capitalacute{}’, intended for use with
10799     capital letters.}
10800 \endsetslot
10801
10802 \setslot{capitalcircumflex}
10803   \comment{The circumflex accent ‘\capitalcircumflex{}’, intended for
10804     use with capital letters.}
10805 \endsetslot
10806
10807 \setslot{capitaltilde}
10808   \comment{The tilde accent ‘\capitaltilde{}’, intended for use with
10809     capital letters.}
10810 \endsetslot
10811
10812 \setslot{capitaldieresis}
10813   \comment{The umlaut or dieresis accent ‘\capitaldieresis{}’,
10814     intended for use with capital letters.}
10815 \endsetslot
10816
10817 \setslot{capitalhungarumlaut}
10818   \comment{The long Hungarian umlaut ‘\capitalhungarumlaut{}’,
10819     intended for use with capital letters.}
10820 \endsetslot
10821
10822 \setslot{capitalring}
10823   \comment{The ring accent ‘\capitalring{}’, intended for use with
10824     capital letters.}
10825 \endsetslot
10826
10827 \setslot{capitalcaron}
10828   \comment{The caron or h\`a\v cek accent ‘\capitalcaron{}’, intended
10829     for use with capital letters.}
10830 \endsetslot
10831
10832 \setslot{capitalbreve}
10833   \comment{The breve accent ‘\capitalbreve{}’, intended for use with
10834     capital letters.}

```

```
10835 \endsetslot
10836
10837 \setslot{capitalmacron}
10838   \comment{The macron accent '\capitalmacron{}', intended for use with
10839   capital letters.}
10840 \endsetslot
10841
10842 \setslot{capitaldotaccent}
10843   \comment{The dot accent '\capitaldotaccent{}', intended for use with
10844   capital letters.}
10845 \endsetslot
10846
10847 \setslot{cedilla}
10848   \comment{The cedilla accent '\capitalcedilla{}', intended for use
10849   with capital letters.}
10850 \endsetslot
10851
10852 \setslot{ogonek}
10853   \comment{The ogonek accent '\capitalogonek{}', intended for use with
10854   capital letters.}
10855 \endsetslot
10856
10857 \nextslot{13}
10858 \setslot{quotesinglbase}
10859   \comment{A straight single quote mark on the baseline,
10860   '\textquotestraightbase'.}
10861 \endsetslot
10862
10863 \nextslot{18}
10864 \setslot{quotedblbase}
10865   \comment{A straight double quote mark on the baseline,
10866   '\textquotestraightdblbase'.}
10867 \endsetslot
10868
10869 \nextslot{21}
10870 \setslot{twelveudash}
10871   \comment{A 2/3~em dash, '\texttwelveudash'.}
10872 \endsetslot
10873
10874 \setslot{threequartersemdash}
10875   \comment{A 3/4~em dash, '\textthreequartersemdash'.}
10876 \endsetslot
10877
10878 \nextslot{23}
10879 \setslot{capitalcompwordmark}
10880   \comment{An invisible glyph, with zero width and depth, but the
10881   height of capital letters.
10882   It is used to stop ligaturing in words like 'shelf{}ful'.}
10883 \endsetslot
10884
10885 \nextslot{24}
10886 \setslot{arrowleft}
10887   \comment{A left pointing arrow, '\textleftarrow', unavailable in
10888   most PostScript fonts.}
```

```
10889 \endsetslot
10890
10891 \setslot{arrowright}
10892   \comment{A right pointing arrow, '\textrightarrow', unavailable in
10893     most PostScript fonts.}
10894 \endsetslot
10895
10896 \nextslot{26}
10897 \setslot{tieaccentlowercase}
10898   \comment{The original tie accent '\t{}', intended for use with
10899     lowercase letters.}
10900 \endsetslot
10901
10902 \setslot{tieaccentcapital}
10903   \comment{The tie accent '\capitaltie{}', intended for use with
10904     capital letters.}
10905 \endsetslot
10906
10907 \setslot{newtieaccentlowercase}
10908   \comment{A new tie accent '\newtie{}', intended for use with
10909     lowercase letters.}
10910 \endsetslot
10911
10912 \setslot{newtieaccentcapital}
10913   \comment{A new tie accent '\capitalnewtie{}', intended for use
10914     with capital letters.}
10915 \endsetslot
10916
10917 \nextslot{31}
10918 \setslot{ascendercompwordmark}
10919   \comment{An invisible glyph, with zero width and depth, but the
10920     height of lowercase letters with ascenders.
10921     It is used to stop ligaturing in words like 'shelf{}ful'.}
10922 \endsetslot
10923
10924 \nextslot{32}
10925 \setslot{blank}
10926   \comment{The blank indicator '\textblank', similar to the letter 'b'
10927     with an oblique bar through the stem.}
10928 \endsetslot
10929
10930 \nextslot{36}
10931 \setslot{dollar}
10932   \comment{The dollar sign '\textdollar'.}
10933 \endsetslot
10934
10935 \nextslot{39}
10936 \setslot{quotesingle}
10937   \comment{A straight single quote mark, '\textquotesingle'.}
10938 \endsetslot
10939
10940 \nextslot{42}
10941 \setslot{asteriskcentered}
10942   \comment{The centered asterisk, '\textasteriskcentered'.}
```

```
10943 \endsetslot
10944
10945 \nextslot{44}
10946 \setslot{comma}
10947     \comment{The decimal comma ','.}
10948 \endsetslot
10949
10950 \nextslot{45}
10951 \setslot{hyphendbl}
10952     \comment{An alternate double hyphen, '\textdblhyphen'.}
10953 \endsetslot
10954
10955 \nextslot{46}
10956 \setslot{period}
10957     \comment{The decimal point '.'.}
10958 \endsetslot
10959
10960 \nextslot{47}
10961 \setslot{fraction}
10962     \comment{The fraction slash '\textfractionsolidus'.}
10963 \endsetslot
10964
10965 \nextslot{48}
10966 \setslot{zerooldstyle}
10967     \comment{The oldstyle number '\oldstylenums{0}'.}
10968 \endsetslot
10969
10970 \setslot{oneoldstyle}
10971     \comment{The oldstyle number '\oldstylenums{1}'.}
10972 \endsetslot
10973
10974 \setslot{twooldstyle}
10975     \comment{The oldstyle number '\oldstylenums{2}'.}
10976 \endsetslot
10977
10978 \setslot{threeoldstyle}
10979     \comment{The oldstyle number '\oldstylenums{3}'.}
10980 \endsetslot
10981
10982 \setslot{fouroldstyle}
10983     \comment{The oldstyle number '\oldstylenums{4}'.}
10984 \endsetslot
10985
10986 \setslot{fiveoldstyle}
10987     \comment{The oldstyle number '\oldstylenums{5}'.}
10988 \endsetslot
10989
10990 \setslot{sixoldstyle}
10991     \comment{The oldstyle number '\oldstylenums{6}'.}
10992 \endsetslot
10993
10994 \setslot{sevenoldstyle}
10995     \comment{The oldstyle number '\oldstylenums{7}'.}
10996 \endsetslot
```

```
10997 \setslot{eightoldstyle}
10998     \comment{The oldstyle number ‘\oldstylenums{8}’.}
10999 \endsetslot
11000
11001 \setslot{nineoldstyle}
11002     \comment{The oldstyle number ‘\oldstylenums{9}’.}
11003 \endsetslot
11004
11005 \nextslot{60}
11006 \setslot{angbracketleft}
11007     \comment{The opening angle bracket ‘\textlangle’, unavailable in
11008         most PostScript fonts.}
11009 \endsetslot
11010
11011 \nextslot{61}
11012 \setslot{minus}
11013     \comment{The subtraction sign ‘\textminus’.}
11014 \endsetslot
11015
11016 \nextslot{62}
11017 \setslot{angbracketright}
11018     \comment{The closing angle bracket ‘\textrangle’, unavailable in
11019         most PostScript fonts.}
11020 \endsetslot
11021
11022 \nextslot{77}
11023 \setslot{Omegainv}
11024     \comment{The inverted Ohm sign ‘\textmho’, unavailable in most fonts.}
11025 \endsetslot
11026
11027 \nextslot{79}
11028     \comment{A circle ‘\textbigcircle’, big enough to enclose a letter
11029         as in ‘\textcopyright’ or ‘\textregistered’.}
11030 \setslot{bigcircle}
11031 \endsetslot
11032
11033 \nextslot{87}
11034 \setslot{Omega}
11035     \comment{The upright Ohm sign ‘\textohm’, unavailable in most fonts.
11036         Even if it is available in Mac-encoded fonts, it isn’t directly
11037         accessible in the 8r or 8y encodings.}
11038 \endsetslot
11039
11040 \nextslot{91}
11041 \setslot{openbracketleft}
11042     \comment{The opening double square bracket ‘\textlbrackdbl’,
11043         unavailable in most PostScript fonts.}
11044 \endsetslot
11045
11046 \nextslot{93}
11047 \setslot{openbracketright}
11048     \comment{The closing double square bracket ‘\textrbrackdbl’,
11049         unavailable in most PostScript fonts.}
```

```
11051 \endsetslot
11052
11053 \nextslot{94}
11054 \setslot{arrowup}
11055     \comment{An upwards pointing arrow ‘\textuparrowarrow’, unavailable in
11056         most PostScript fonts.}
11057 \endsetslot
11058
11059 \nextslot{95}
11060 \setslot{arrowdown}
11061     \comment{An downwards pointing arrow ‘\textdownarrowarrow’, unavailable
11062         in most PostScript fonts.}
11063 \endsetslot
11064
11065 \nextslot{96}
11066 \setslot{asciigrave}
11067     \comment{An ASCII-style grave ‘\textasciigrave’. This is supposed
11068         to be a character by itself rather than a combining accents.}
11069 \endsetslot
11070
11071 \nextslot{98}
11072 \setslot{born}
11073     \comment{The born symbol ‘\textborn’, unavailable in most PostScript
11074         fonts.}
11075 \endsetslot
11076
11077 \nextslot{99}
11078 \setslot{divorced}
11079     \comment{The divorced symbol ‘\textdivorced’, unavailable in most
11080         PostScript fonts.}
11081 \endsetslot
11082
11083 \nextslot{100}
11084 \setslot{died}
11085     \comment{The died symbol ‘\textdied’, unavailable in most PostScript
11086         fonts.}
11087 \endsetslot
11088
11089 \nextslot{108}
11090 \setslot{leaf}
11091     \comment{The leaf symbol ‘\textleaf’, unavailable in most PostScript
11092         fonts.}
11093 \endsetslot
11094
11095 \nextslot{109}
11096 \setslot{married}
11097     \comment{The married symbol ‘\textmarried’, unavailable in most
11098         PostScript fonts.}
11099 \endsetslot
11100
11101 \nextslot{110}
11102 \setslot{musicalnote}
11103     \comment{A musical note symbol ‘\textmusicalnote’, unavailable in
11104         most PostScript fonts.}
```

```
11105 \endsetslot
11106
11107 \nextslot{126}
11108 \setslot{tildelow}
11109   \comment{A lowered tilde ‘\texttildelow’. In most PostScript fonts
11110     it can be substituted by ‘ascitilde’, while ‘\textasciitilde’
11111     is supposed to be a raised ‘tilde’.}
11112 \endsetslot
11113
11114 \nextslot{127}
11115 \setslot{hyphendblchar}
11116   \comment{The glyph used for hyphenation in this font, which will
11117     almost always be the same as ‘hyphendbl’.}
11118 \endsetslot
11119
11120 \nextslot{128}
11121 \setslot{asciibreve}
11122   \comment{An ASCII-style breve ‘\textasciibreve’. This is supposed
11123     to be a character by itself rather than a combining accents.}
11124 \endsetslot
11125
11126 \setslot{asciicaron}
11127   \comment{An ASCII-style caron ‘\textasciicaron’. This is supposed
11128     to be a character by itself rather than a combining accents.}
11129 \endsetslot
11130
11131 \setslot{asciiacutedbl}
11132   \comment{An ASCII-style double tick mark, ‘\textacutedbl’.}
11133 \endsetslot
11134
11135 \setslot{asciigravedbl}
11136   \comment{An ASCII-style double backtick mark, ‘\textgravedbl’.}
11137 \endsetslot
11138
11139 \setslot{dagger}
11140   \comment{The single dagger ‘\textdagger’.}
11141 \endsetslot
11142
11143 \setslot{daggerdbl}
11144   \comment{The double dagger ‘\textdaggerdbl’.}
11145 \endsetslot
11146
11147 \setslot{bardbl}
11148   \comment{The double vertical bar ‘\textbardbl’.}
11149 \endsetslot
11150
11151 \setslot{perthousand}
11152   \comment{The perthousand sign ‘\textperthousand’.}
11153 \endsetslot
11154
11155 \setslot{bullet}
11156   \comment{The centered bullet ‘\textbullet’.}
11157 \endsetslot
11158
```

```
11159 \setslot{centigrade}
11160     \comment{The degree centigrade symbol ‘\textcelsius’.}
11161 \endsetslot
11162
11163 \setslot{dollaroldstyle}
11164     \comment{An oldstyle dollar sign ‘\textdollaroldstyle’.}
11165 \endsetslot
11166
11167 \setslot{centoldstyle}
11168     \comment{An oldstyle cent sign ‘\textcentoldstyle’.}
11169 \endsetslot
11170
11171 \setslot{florin}
11172     \comment{The florin sign ‘\textflorin’.}
11173 \endsetslot
11174
11175 \setslot{colonmonetary}
11176     \comment{The Colon currency sign ‘\textcolonmonetary’, similar to
11177         a capital ‘C’ with a vertical bar through the middle.}
11178 \endsetslot
11179
11180 \setslot{won}
11181     \comment{The Won currency sign ‘\textwon’, similar to a capital ‘W’
11182         with two horizontal bars.}
11183 \endsetslot
11184
11185 \setslot{naira}
11186     \comment{The Naira currency sign ‘\textnaira’, similar to a
11187         capital ‘N’ with two horizontal bars.}
11188 \endsetslot
11189
11190 \setslot{guarani}
11191     \comment{The Guarani currency sign ‘\textguarani’, similar to
11192         a capital ‘G’ with a vertical bar through the middle.}
11193 \endsetslot
11194
11195 \setslot{peso}
11196     \comment{The Peso currency sign ‘\textpeso’, similar to a capital ‘P’
11197         with a horizontal bar through the bowl or below the bowl.}
11198 \endsetslot
11199
11200 \setslot{lira}
11201     \comment{The Lira currency sign ‘\textlira’, similar to a sterlign
11202         sign ‘\textsterling’ with two horizontal bars.}
11203 \endsetslot
11204
11205 \setslot{recipe}
11206     \comment{The recipe symbol ‘\textrecipe’, similar to a capital ‘R’
11207         with an oblique bar through the tail.}
11208 \endsetslot
11209
11210 \setslot{interrobang}
11211     \comment{The interrobang symbol ‘\textinterrobang’, similar to
11212         a combination of an exclamation mark and a question mark.}
```

```
11213 \endsetslot
11214
11215 \setslot{interrobangdown}
11216   \comment{The inverted interrobang symbol ‘\textinterrobangdown’,
11217     similar to a combination of an inverted exclamation mark
11218     and an inverted question mark.}
11219 \endsetslot
11220
11221 \setslot{dong}
11222   \comment{The Dong currency sign ‘\textdong’, similar to a lowercase
11223     ‘d’ with a horizontal bar through the stem and another bar below
11224     the letter.}
11225 \endsetslot
11226
11227 \setslot{trademark}
11228   \comment{The trademark sign ‘\texttrademark’, similar to the raised
11229     letters ‘TM’.}
11230 \endsetslot
11231
11232 \setslot{pertenthousand}
11233   \comment{The pertenthousand sign ‘\textpertenthousand’, unavailable
11234     in most PostScript fonts.}
11235 \endsetslot
11236
11237 \setslot{pilcrow}
11238   \comment{The pilcrow mark ‘\textpilcrow’, similar to a paragraph
11239     mark ‘\textparagraph’ with a single stem.}
11240 \endsetslot
11241
11242 \setslot{baht}
11243   \comment{The Baht currency sign ‘\textbaht’, similar to a capital ‘B’
11244     with a vertical bar through the middle.}
11245 \endsetslot
11246
11247 \setslot{numero}
11248   \comment{The numero sign ‘\textnumero’, similar to the letter ‘N’
11249     with a raised ‘o’, unavailable in most PostScript fonts.}
11250 \endsetslot
11251
11252 \setslot{discount}
11253   \comment{The discount sign ‘\textdiscount’, similar to a stylized
11254     percent sign, unavailable in most PostScript fonts.}
11255 \endsetslot
11256
11257 \setslot{estimated}
11258   \comment{The estimated sign ‘\textestimated’, similar to an enlarged
11259     lowercase ‘e’, unavailable in most PostScript fonts.}
11260 \endsetslot
11261
11262 \setslot{openbullet}
11263   \comment{The centered open bullet ‘\textopenbullet’, unavailable
11264     in most PostScript fonts.}
11265 \endsetslot
11266
```

```
11267 \setslot{servicemark}
11268   \comment{The service mark sign ‘\textservicemark’, similar to the
11269     raised letters ‘SM’, unavailable in most PostScript fonts.}
11270 \endsetslot
11271
11272 \nextslot{160}
11273 \setslot{quillbracketleft}
11274   \comment{The opening quill bracket ‘\textlquill’, unavailable in
11275     most PostScript fonts.}
11276 \endsetslot
11277
11278 \setslot{quillbracketright}
11279   \comment{The closing quill bracket ‘\textrquill’, unavailable in
11280     most PostScript fonts.}
11281 \endsetslot
11282
11283 \setslot{cent}
11284   \comment{The cent sign ‘\textcent’.}
11285 \endsetslot
11286
11287 \setslot{sterling}
11288   \comment{The British currency sign, ‘\textsterling’.}
11289 \endsetslot
11290
11291 \setslot{currency}
11292   \comment{The international currency sign, ‘\textcurrency’.}
11293 \endsetslot
11294
11295 \setslot{yen}
11296   \comment{The Japanese currency sign, ‘\textyen’.}
11297 \endsetslot
11298
11299 \setslot{brokenbar}
11300   \comment{A broken vertical bar, ‘\textbrokenbar’, similar to
11301     ‘\textbar’ with a gap through the middle.}
11302 \endsetslot
11303
11304 \setslot{section}
11305   \comment{The section mark ‘\textsection’.}
11306 \endsetslot
11307
11308 \setslot{asciidieresis}
11309   \comment{An ASCII-style dieresis ‘\textasciidieresis’. This is
11310     supposed to be character by itself rather than an accents.}
11311 \endsetslot
11312
11313 \setslot{copyright}
11314   \comment{The copyright sign ‘\textcopyright’, similar to a small
11315     letter ‘C’ enclosed by a circle.}
11316 \endsetslot
11317
11318 \setslot{ordfeminine}
11319   \comment{The raised letter ‘\textordfeminine’.}
11320 \endsetslot
```

```
11321 \setslot{copyleft}
11322   \comment{The reversed copyright sign ‘\textcopyleft’, similar to
11323     a small reversed ‘C’ enclosed by a circle.}
11324 \endsetslot
11326
11327 \setslot{logicalnot}
11328   \comment{The logical not sign ‘\textlnot’.}
11329 \endsetslot
11330
11331 \setslot{circledP}
11332   \comment{A small letter ‘P’ enclosed by a circle, ‘\textcircledP’,
11333     unavailable in most fonts.}
11334 \endsetslot
11335
11336 \setslot{registered}
11337   \comment{The registered trademark sign ‘\textregistered’, similar to
11338     a small letter ‘R’ enclosed by a circle.}
11339 \endsetslot
11340
11341 \setslot{asciimacron}
11342   \comment{An ASCII-style macron ‘\textasciimacron’. This is supposed
11343     to be a character by itself rather than a combining accents.}
11344 \endsetslot
11345
11346 \setslot{degree}
11347   \comment{The degree sign ‘\textdegree’.}
11348 \endsetslot
11349
11350 \setslot{plusminus}
11351   \comment{The plus or minus sign ‘\textpm’.}
11352 \endsetslot
11353
11354 \setslot{twosuperior}
11355   \comment{The raised digit ‘\texttwosuperior’.}
11356 \endsetslot
11357
11358 \setslot{threesuperior}
11359   \comment{The raised digit ‘\textthreesuperior’.}
11360 \endsetslot
11361
11362 \setslot{asciiacute}
11363   \comment{An ASCII-style acute ‘\textasciiacute’. This is supposed
11364     to be a character by itself rather than a combining accents.}
11365 \endsetslot
11366
11367 \setslot{mu}
11368   \comment{The lowercase Greek letter ‘\textmu’, intended for use as
11369     a prefix ‘micro’ in physical units.}
11370 \endsetslot
11371
11372 \setslot{paragraph}
11373   \comment{The paragraph mark ‘\textparagraph’.}
11374 \endsetslot
```

```

11375
11376 \setslot{periodcentered}
11377   \comment{The centered period ‘\textperiodcentered’.}
11378 \endsetslot
11379
11380 \setslot{referencemark}
11381   \comment{The reference mark ‘\textreferencemark’, similar to
11382     a combination of the ‘multiply’ and ‘divide’ symbols.}
11383 \endsetslot
11384
11385 \setslot{onesuperior}
11386   \comment{The raised digit ‘\textonesuperior’.}
11387 \endsetslot
11388
11389 \setslot{ordmasculine}
11390   \comment{The raised letter ‘\textordmasculine’.}
11391 \endsetslot
11392
11393 \setslot{radical}
11394   \comment{The radical sign ‘\textsurd’, unavailable in most fonts.
11395     Even if it is available in Mac-encoded fonts, it isn’t directly
11396     accessible in the 8r or 8y encodings.}
11397 \endsetslot
11398
11399 \setslot{onequarter}
11400   \comment{The fraction ‘\textonequarter’.}
11401 \endsetslot
11402
11403 \setslot{onehalf}
11404   \comment{The fraction ‘\textonehalf’.}
11405 \endsetslot
11406
11407 \setslot{threequarters}
11408   \comment{The fraction ‘\textthreequarters’.}
11409 \endsetslot
11410
11411 \ifisglyph{euro}\then
11412   \setslot{euro}
11413   \comment{The European currency sign, similar to ‘\texteuro’.}
11414 \endsetslot
11415 \Else
11416   \setslot{Euro}
11417   \comment{The European currency sign, similar to ‘\texteuro’.}
11418 \endsetslot
11419 \Fi
11420
11421 \setslot{Euro}
11422 \comment{This just makes sure that any glyph labelled ‘Euro’ in the font gets
11423     encoded.
11424     The TS1 encoding will use the previous slot when the font is actually used by
11425     tex.
11426     At least, I think so.
11427     That is, since we’ve got spare slots in this encoding, we can use them to enable
11428     ‘either... or...’ encoding options both for reencoding the fonts for fontinst and
11429     fontforge.
11430 }
```

```

        for the tex encodings. (?!)}
11426 \endsetslot
11427
11428 \setslot{euro}
11429 \comment{This just makes sure that any glyph labelled ‘euro’ in the font gets
11430 encoded.
11431 The TS1 encoding will use the previous slot when the font is actually used by
11432 tex.
11433 At least, I think so.
11434 That is, since we’ve got spare slots in this encoding, we can use them to enable
11435 ‘either... or...’ encoding options both for reencoding the fonts for fontinst and
11436 for the tex encodings. (?!)}
11437 \endsetslot
11438
11439 \nextslot{214}
11440 \setslot{multiply}
11441 \comment{The multiplication sign ‘\texttimes’.
11442 This symbol was originally intended to be put into slot~215,
11443 but ended up in this slot by mistake, at which time it was
11444 considered too late to change it.}
11445 \endsetslot
11446
11447 \nextslot{246}
11448 \setslot{divide}
11449 \comment{The division sign ‘\textdiv’.
11450 This symbol was originally intended to be put into slot~247,
11451 but ended up in this slot by mistake, at which time it was
11452 considered too late to change it.}
11453 \endsetslot

```

#### 4.3.17 ucdotalt.etx

ucdotalt.etx (*etx*)

```

11454 \relax
11455 \encoding
11456
11457 \setcommand\uc#1#2{\#1.alt}
11458 \setcommand\uctop#1#2{\#1.alt}
11459 \ifisint{letterspacing}\then
11460   \ifnumber{\int{letterspacing}}={0}\then \Else
11461     \setcommand\uclig#1#2{\#1.altspaced}
11462     \comment{Here we set \verb|\uclig#1#2| to \verb|\verb|\#1.altspaced|, but
11463 you can’t see it as \verb|\verb|\setcommand| commands are invisible in
11464 the typeset output.}
11465   \Fi
11466 \Fi
11467 \setcommand\uclig#1#2{\#1.alt}
11468

```

---

```
11469 \endencoding
```

# Change History

v0.1

General: First public release. . . . . 1

# Index

The italic numbers denote the pages where the corresponding entry is described, numbers underlined point to the definition, all others indicate the places where it is used.

Symbols	
\"	574, 731, 1250, 1383, 1436, 1465, 1481, 1511, 1536, 1570, 1599, 1615, 1645, 1670, 1857, 2016, 2533, 2666, 2719, 2748, 2764, 2794, 2819, 2853, 2882, 2898, 2928, 2953, 3134, 3293, 3810, 3943, 3996, 4025, 4041, 4071, 4096, 4130, 4159, 4175, 4205, 4230, 4411, 4570, 5087, 5220, 5273, 5302, 5318, 5348, 5373, 5407, 5436, 5452, 5482, 5507, 5688, 5847, 6364, 6497, 6550, 6579, 6595, 6625, 6650, 6684, 6713, 6729, 6759, 6784, 6965, 7124, 7641, 7774, 7827, 7856, 7872, 7902, 7927, 7961, 7990, 8006, 8036, 8061, 8247, 8406, 8923, 9059, 9112, 9141, 9157, 9187, 9212, 9246, 9275, 9291, 9321, 9346
\#	736, 2021, 3298, 4575, 5852, 7129, 8411
\\$	740, 2025, 3302, 4579, 5856, 7133, 8415
\%	. . . . . 669, 744, 1954, 2029, 3231, 3306, 4508, 4583, 5785, 5860, 7062, 7137, 8344, 8419
\&	748, 2033, 3310, 4587, 5864, 7141, 8423
\'	. . . 562, 586, 1160, 1184, 1196, 1214, 1222, 1254, 1295, 1319, 1331, 1347, 1355, 1387, 1424, 1457, 1473, 1499, 1528, 1540, 1558, 1591, 1607, 1633, 1662, 1674, 1845, 1869, 2445, 2469, 2481, 2497, 2505, 2537, 2578, 2602, 2614, 2630, 2638, 2670, 2707, 2740, 2756, 2782, 2811, 2823, 2841, 2874, 2890, 2916, 2945, 2957, 3122, 3146, 3722, 3746, 3758, 3774, 3782, 3814, 3855, 3879, 3891, 3907, 3915, 3947,
\,	3984, 4017, 4033, 4059, 4088, 4100, 4118, 4151, 4167, 4193, 4222, 4234, 4399, 4423, 4999, 5023, 5035, 5051, 5059, 5091, 5132, 5156, 5168, 5184, 5192, 5224, 5261, 5294, 5310, 5336, 5365, 5377, 5395, 5428, 5444, 5470, 5499, 5511, 5676, 5700, 6276, 6300, 6312, 6328, 6336, 6368, 6409, 6433, 6445, 6461, 6469, 6501, 6538, 6571, 6587, 6613, 6642, 6654, 6672, 6705, 6721, 6747, 6776, 6788, 6953, 6977, 7553, 7577, 7589, 7605, 7613, 7645, 7686, 7710, 7722, 7738, 7746, 7778, 7815, 7848, 7864, 7890, 7919, 7931, 7949, 7982, 7998, 8024, 8053, 8065, 8235, 8259, 8835, 8859, 8871, 8887, 8895, 8927, 8968, 8992, 9004, 9023, 9031, 9063, 9100, 9133, 9149, 9175, 9204, 9216, 9234, 9267, 9283, 9309, 9338, 9350, 9460, 10146, 10828
\,	. . . . . 625, 629, 728, 753, 998, 1908, 1912, 2013, 2038, 2283, 3185, 3189, 3290, 3315, 3560, 4462, 4466, 4567, 4592, 4837, 5739, 5743, 5844, 5869, 6114, 7016, 7020, 7121, 7146, 7391, 8298, 8302, 8403, 8428, 8673
\.	. . . 598, 1262, 1275, 1395, 1881, 2545, 2558, 2678, 3158, 3822, 3835, 3955, 4435, 5099, 5112, 5232, 5712, 6376, 6389, 6509, 6989, 7653, 7666, 7786, 8271, 8935, 8948, 9071
\=	. . . . . 594, 677, 682, 1877, 1962, 1967, 3154, 3239, 3244, 4431, 4516, 4521, 5708, 5793, 5798,

6985, 7070, 7075, 8267, 8352, 8357  
 $\text{\l}$  . . . . . 616, 621, 639,  
 644, 682, 731, 1204, 1339, 1487,  
 1545, 1621, 1680, 1899, 1904, 1922,  
 1927, 1967, 2016, 2489, 2622, 2770,  
 2828, 2904, 2963, 3176, 3181, 3199,  
 3204, 3244, 3293, 3766, 3899,  
 4047, 4105, 4181, 4240, 4453, 4458,  
 4476, 4481, 4521, 4570, 5043, 5176,  
 5324, 5382, 5458, 5517, 5730, 5735,  
 5753, 5758, 5798, 5847, 6320,  
 6453, 6601, 6659, 6735, 6794,  
 7007, 7012, 7030, 7035, 7075, 7124,  
 7597, 7730, 7878, 7936, 8012, 8071,  
 8289, 8294, 8312, 8317, 8357, 8406,  
 8879, 9013, 9163, 9221, 9297, 9356  
 $\text{\^}$  . . . . . 566, 1428,  
 1461, 1477, 1503, 1532, 1562, 1595,  
 1611, 1637, 1666, 1849, 2711, 2744,  
 2760, 2786, 2815, 2845, 2878, 2894,  
 2920, 2949, 3126, 3988, 4021, 4037,  
 4063, 4092, 4122, 4155, 4171, 4197,  
 4226, 4403, 5265, 5298, 5314,  
 5340, 5369, 5399, 5432, 5448,  
 5474, 5503, 5680, 6542, 6575, 6591,  
 6617, 6646, 6676, 6709, 6725, 6751,  
 6780, 6957, 7819, 7852, 7868, 7894,  
 7923, 7953, 7986, 8002, 8028,  
 8057, 8239, 9104, 9137, 9153, 9179,  
 9208, 9238, 9271, 9287, 9313, 9342  
 $\text{\`}$  . . . . . 558, 1420,  
 1453, 1469, 1495, 1524, 1554, 1587,  
 1603, 1629, 1658, 1841, 2703, 2736,  
 2752, 2778, 2807, 2837, 2870,  
 2886, 2912, 2941, 3118, 3980, 4013,  
 4029, 4055, 4084, 4114, 4147, 4163,  
 4189, 4218, 4395, 5257, 5290, 5306,  
 5332, 5361, 5391, 5424, 5440, 5466,  
 5495, 5672, 6534, 6567, 6583,  
 6609, 6638, 6668, 6701, 6717,  
 6743, 6772, 6949, 7811, 7844, 7860,  
 7886, 7915, 7945, 7978, 7994, 8020,  
 8049, 8231, 9096, 9129, 9145, 9171,  
 9200, 9230, 9263, 9279, 9305, 9334  
 $\text{\~}$  . . . . . 570, 1432, 1491, 1507, 1566, 1625,  
 1641, 1853, 2715, 2774, 2790, 2849,  
 2908, 2924, 3130, 3992, 4051,  
 4067, 4126, 4185, 4201, 4407, 5269,  
 5328, 5344, 5403, 5462, 5478,  
 5684, 6546, 6605, 6621, 6680,  
 6739, 6755, 6961, 7823, 7882,  
 7898, 7957, 8016, 8032, 8243,  
 9108, 9167, 9183, 9242, 9301, 9317

**A**

$\text{\add}$  . . . . . 275, 287, 301, 317, 331, 350, 366  
 $\text{\AE}$  1444, 2727, 4004, 5281, 6558, 7835, 9120  
 $\text{\ae}$  1578, 2861, 4138, 5415, 6692, 7969, 9254  
 $\text{\Heading}$  . . . . . 62, 67  
 $\text{\autotestfdfs}$  (var) . . . . . 4, 14

**B**

$\text{\begin{}$  . . . . . 52, 71  
 $\text{\begin{comment}}$  . . . . . 26, 48, 165  
 $\text{\binmakers}$  (var) . . . . . 6, 14  
 $\text{\botaccent}$  . . . . . 43, 68

**C**

$\text{\c}$  . . . . . 602, 1230, 1238,  
 1363, 1371, 1449, 1583, 1885, 2513,  
 2521, 2646, 2654, 2732, 2866, 3162,  
 3790, 3798, 3923, 3931, 4009, 4143,  
 4439, 5067, 5075, 5200, 5208,  
 5286, 5420, 5716, 6344, 6352, 6477,  
 6485, 6563, 6697, 6993, 7621,  
 7629, 7754, 7762, 7840, 7974, 8275,  
 8903, 8911, 9039, 9047, 9125, 9259  
 $\text{\capitalacute}$  . . . . . 9430, 10116, 10798  
 $\text{\capitalbreve}$  . . . . . 9465, 10151, 10833  
 $\text{\capitalcaron}$  . . . . . 9460, 10146, 10828  
 $\text{\capitalcedilla}$  . . . . . 9480, 10166, 10848  
 $\text{\capitalcircumflex}$  . . . . . 9435, 10121, 10803  
 $\text{\capitaldieresis}$  . . . . . 9445, 10131, 10813  
 $\text{\capitaldotaccent}$  . . . . . 9475, 10161, 10843  
 $\text{\capitalgrave}$  . . . . . 9425, 10111, 10793  
 $\text{\capitalhungarumlaut}$  . . . . . 9450, 10136, 10818  
 $\text{\capitalmacron}$  . . . . . 9470, 10156, 10838  
 $\text{\capitalnewtie}$  . . . . . 9545, 10231, 10913  
 $\text{\capitalogonek}$  . . . . . 9485, 10171, 10853  
 $\text{\capitalring}$  . . . . . 9455, 10141, 10823  
 $\text{\capitaltie}$  . . . . . 9535, 10221, 10903  
 $\text{\capitaltilde}$  . . . . . 9440, 10126, 10808  
 $\text{\char}$  731, 2016, 3293, 4570, 5847, 7124, 8406  
 $\text{\checkinit\_hook()}$  (fn) . . . . . 4, 14  
 $\text{\clearpage}$  . . . . . 11  
 $\text{\comment}$  . . . . .  
 433, 551, 558, 562, 566, 570, 574,  
 578, 582, 586, 590, 594, 598, 602,  
 606, 610, 615, 620, 625, 629, 633,  
 638, 643, 649, 656, 663, 669, 676,  
 681, 692, 697, 702, 707, 712, 719,  
 724, 728, 736, 740, 744, 748, 753,  
 757, 761, 765, 769, 774, 780, 784,  
 788, 792, 797, 801, 805, 809, 813,  
 817, 821, 825, 829, 833, 837, 842,  
 846, 851, 856, 860, 864, 868, 872,  
 876, 880, 884, 888, 892, 898, 904,  
 908, 912, 916, 920, 924, 928, 932,

936, 940, 944, 948, 952, 956, 960,  
964, 968, 972, 976, 980, 984, 990,  
998, 1002, 1006, 1012, 1018, 1022,  
1033, 1039, 1043, 1049, 1055, 1059,  
1063, 1067, 1071, 1075, 1079, 1083,  
1087, 1093, 1099, 1103, 1107, 1111,  
1115, 1119, 1123, 1127, 1131, 1137,  
1141, 1147, 1152, 1156, 1160, 1164,  
1168, 1172, 1176, 1180, 1184, 1188,  
1192, 1196, 1200, 1204, 1210, 1214,  
1218, 1222, 1226, 1230, 1234, 1238,  
1242, 1246, 1250, 1254, 1258, 1262,  
1268, 1275, 1279, 1283, 1287, 1291,  
1295, 1299, 1303, 1307, 1311, 1315,  
1319, 1323, 1327, 1331, 1335, 1339,  
1343, 1347, 1351, 1355, 1359, 1363,  
1367, 1371, 1375, 1379, 1383, 1387,  
1391, 1395, 1401, 1408, 1412, 1416,  
1420, 1424, 1428, 1432, 1436, 1440,  
1444, 1449, 1453, 1457, 1461, 1465,  
1469, 1473, 1477, 1481, 1485, 1491,  
1495, 1499, 1503, 1507, 1511, 1515,  
1520, 1524, 1528, 1532, 1536, 1540,  
1544, 1549, 1554, 1558, 1562, 1566,  
1570, 1574, 1578, 1583, 1587, 1591,  
1595, 1599, 1603, 1607, 1611, 1615,  
1619, 1625, 1629, 1633, 1637, 1641,  
1645, 1649, 1654, 1658, 1662, 1666,  
1670, 1674, 1678, 1684, 1716, 1834,  
1841, 1845, 1849, 1853, 1857, 1861,  
1865, 1869, 1873, 1877, 1881, 1885,  
1889, 1893, 1898, 1903, 1908, 1912,  
1916, 1921, 1926, 1932, 1940, 1948,  
1954, 1961, 1966, 1977, 1982, 1987,  
1992, 1997, 2004, 2009, 2013, 2021,  
2025, 2029, 2033, 2038, 2042,  
2046, 2050, 2054, 2059, 2065,  
2069, 2073, 2077, 2082, 2086,  
2090, 2094, 2098, 2102, 2106, 2110,  
2114, 2118, 2122, 2127, 2131, 2136,  
2141, 2145, 2149, 2153, 2157, 2161,  
2165, 2169, 2173, 2177, 2183, 2189,  
2193, 2197, 2201, 2205, 2209, 2213,  
2217, 2221, 2225, 2229, 2233, 2237,  
2241, 2245, 2249, 2253, 2257, 2261,  
2265, 2269, 2275, 2283, 2287,  
2291, 2297, 2303, 2307, 2318, 2324,  
2328, 2334, 2340, 2344, 2348,  
2352, 2356, 2360, 2364, 2368,  
2372, 2378, 2384, 2388, 2392,  
2396, 2400, 2404, 2408, 2412, 2416,  
2422, 2426, 2432, 2437, 2441, 2445,  
2449, 2453, 2457, 2461, 2465, 2469,  
2473, 2477, 2481, 2485, 2489, 2493,  
2497, 2501, 2505, 2509, 2513, 2517,  
2521, 2525, 2529, 2533, 2537, 2541,  
2545, 2551, 2558, 2562, 2566,  
2570, 2574, 2578, 2582, 2586,  
2590, 2594, 2598, 2602, 2606,  
2610, 2614, 2618, 2622, 2626, 2630,  
2634, 2638, 2642, 2646, 2650,  
2654, 2658, 2662, 2666, 2670,  
2674, 2678, 2684, 2691, 2695, 2699,  
2703, 2707, 2711, 2715, 2719, 2723,  
2727, 2732, 2736, 2740, 2744, 2748,  
2752, 2756, 2760, 2764, 2768, 2774,  
2778, 2782, 2786, 2790, 2794, 2798,  
2803, 2807, 2811, 2815, 2819, 2823,  
2827, 2832, 2837, 2841, 2845, 2849,  
2853, 2857, 2861, 2866, 2870,  
2874, 2878, 2882, 2886, 2890,  
2894, 2898, 2902, 2908, 2912,  
2916, 2920, 2924, 2928, 2932,  
2937, 2941, 2945, 2949, 2953,  
2957, 2961, 2967, 2993, 3111, 3118,  
3122, 3126, 3130, 3134, 3138, 3142,  
3146, 3150, 3154, 3158, 3162, 3166,  
3170, 3175, 3180, 3185, 3189, 3193,  
3198, 3203, 3209, 3217, 3225, 3231,  
3238, 3243, 3254, 3259, 3264,  
3269, 3274, 3281, 3286, 3290,  
3298, 3302, 3306, 3310, 3315,  
3319, 3323, 3327, 3331, 3336,  
3342, 3346, 3350, 3354, 3359,  
3363, 3367, 3371, 3375, 3379,  
3383, 3387, 3391, 3395, 3399,  
3404, 3408, 3413, 3418, 3422, 3426,  
3430, 3434, 3438, 3442, 3446,  
3450, 3454, 3460, 3466, 3470, 3474,  
3478, 3482, 3486, 3490, 3494,  
3498, 3502, 3506, 3510, 3514,  
3518, 3522, 3526, 3530, 3534,  
3538, 3542, 3546, 3552, 3560,  
3564, 3568, 3574, 3580, 3584,  
3595, 3601, 3605, 3611, 3617, 3621,  
3625, 3629, 3633, 3637, 3641,  
3645, 3649, 3655, 3661, 3665,  
3669, 3673, 3677, 3681, 3685,  
3689, 3693, 3699, 3703, 3709,  
3714, 3718, 3722, 3726, 3730, 3734,  
3738, 3742, 3746, 3750, 3754, 3758,  
3762, 3766, 3770, 3774, 3778, 3782,  
3786, 3790, 3794, 3798, 3802,  
3806, 3810, 3814, 3818, 3822, 3828,  
3835, 3839, 3843, 3847, 3851,  
3855, 3859, 3863, 3867, 3871,  
3875, 3879, 3883, 3887, 3891,  
3895, 3899, 3903, 3907, 3911,

3915, 3919, 3923, 3927, 3931, 3935,  
3939, 3943, 3947, 3951, 3955,  
3961, 3968, 3972, 3976, 3980,  
3984, 3988, 3992, 3996, 4000,  
4004, 4009, 4013, 4017, 4021, 4025,  
4029, 4033, 4037, 4041, 4045, 4051,  
4055, 4059, 4063, 4067, 4071, 4075,  
4080, 4084, 4088, 4092, 4096,  
4100, 4104, 4109, 4114, 4118, 4122,  
4126, 4130, 4134, 4138, 4143, 4147,  
4151, 4155, 4159, 4163, 4167, 4171,  
4175, 4179, 4185, 4189, 4193, 4197,  
4201, 4205, 4209, 4214, 4218, 4222,  
4226, 4230, 4234, 4238, 4244, 4270,  
4388, 4395, 4399, 4403, 4407,  
4411, 4415, 4419, 4423, 4427, 4431,  
4435, 4439, 4443, 4447, 4452, 4457,  
4462, 4466, 4470, 4475, 4480, 4486,  
4494, 4502, 4508, 4515, 4520, 4531,  
4536, 4541, 4546, 4551, 4558, 4563,  
4567, 4575, 4579, 4583, 4587, 4592,  
4596, 4600, 4604, 4608, 4613, 4619,  
4623, 4627, 4631, 4636, 4640, 4644,  
4648, 4652, 4656, 4660, 4664,  
4668, 4672, 4676, 4681, 4685, 4690,  
4695, 4699, 4703, 4707, 4711, 4715,  
4719, 4723, 4727, 4731, 4737, 4743,  
4747, 4751, 4755, 4759, 4763, 4767,  
4771, 4775, 4779, 4783, 4787, 4791,  
4795, 4799, 4803, 4807, 4811, 4815,  
4819, 4823, 4829, 4837, 4841, 4845,  
4851, 4857, 4861, 4872, 4878, 4882,  
4888, 4894, 4898, 4902, 4906,  
4910, 4914, 4918, 4922, 4926, 4932,  
4938, 4942, 4946, 4950, 4954,  
4958, 4962, 4966, 4970, 4976,  
4980, 4986, 4991, 4995, 4999,  
5003, 5007, 5011, 5015, 5019, 5023,  
5027, 5031, 5035, 5039, 5043,  
5047, 5051, 5055, 5059, 5063,  
5067, 5071, 5075, 5079, 5083,  
5087, 5091, 5095, 5099, 5105,  
5112, 5116, 5120, 5124, 5128, 5132,  
5136, 5140, 5144, 5148, 5152, 5156,  
5160, 5164, 5168, 5172, 5176, 5180,  
5184, 5188, 5192, 5196, 5200, 5204,  
5208, 5212, 5216, 5220, 5224, 5228,  
5232, 5238, 5245, 5249, 5253,  
5257, 5261, 5265, 5269, 5273, 5277,  
5281, 5286, 5290, 5294, 5298,  
5302, 5306, 5310, 5314, 5318, 5322,  
5328, 5332, 5336, 5340, 5344,  
5348, 5352, 5357, 5361, 5365,  
5369, 5373, 5377, 5381, 5386,  
5391, 5395, 5399, 5403, 5407, 5411,  
5415, 5420, 5424, 5428, 5432, 5436,  
5440, 5444, 5448, 5452, 5456, 5462,  
5466, 5470, 5474, 5478, 5482, 5486,  
5491, 5495, 5499, 5503, 5507, 5511,  
5515, 5521, 5547, 5665, 5672, 5676,  
5680, 5684, 5688, 5692, 5696,  
5700, 5704, 5708, 5712, 5716, 5720,  
5724, 5729, 5734, 5739, 5743, 5747,  
5752, 5757, 5763, 5771, 5779, 5785,  
5792, 5797, 5808, 5813, 5818, 5823,  
5828, 5835, 5840, 5844, 5852,  
5856, 5860, 5864, 5869, 5873,  
5877, 5881, 5885, 5890, 5896,  
5900, 5904, 5908, 5913, 5917, 5921,  
5925, 5929, 5933, 5937, 5941,  
5945, 5949, 5953, 5958, 5962,  
5967, 5972, 5976, 5980, 5984,  
5988, 5992, 5996, 6000, 6004,  
6008, 6014, 6020, 6024, 6028,  
6032, 6036, 6040, 6044, 6048,  
6052, 6056, 6060, 6064, 6068,  
6072, 6076, 6080, 6084, 6088,  
6092, 6096, 6100, 6106, 6114, 6118,  
6122, 6128, 6134, 6138, 6149, 6155,  
6159, 6165, 6171, 6175, 6179, 6183,  
6187, 6191, 6195, 6199, 6203, 6209,  
6215, 6219, 6223, 6227, 6231, 6235,  
6239, 6243, 6247, 6253, 6257,  
6263, 6268, 6272, 6276, 6280,  
6284, 6288, 6292, 6296, 6300,  
6304, 6308, 6312, 6316, 6320,  
6324, 6328, 6332, 6336, 6340,  
6344, 6348, 6352, 6356, 6360,  
6364, 6368, 6372, 6376, 6382,  
6389, 6393, 6397, 6401, 6405,  
6409, 6413, 6417, 6421, 6425, 6429,  
6433, 6437, 6441, 6445, 6449, 6453,  
6457, 6461, 6465, 6469, 6473, 6477,  
6481, 6485, 6489, 6493, 6497, 6501,  
6505, 6509, 6515, 6522, 6526,  
6530, 6534, 6538, 6542, 6546,  
6550, 6554, 6558, 6563, 6567,  
6571, 6575, 6579, 6583, 6587, 6591,  
6595, 6599, 6605, 6609, 6613,  
6617, 6621, 6625, 6629, 6634,  
6638, 6642, 6646, 6650, 6654,  
6658, 6663, 6668, 6672, 6676,  
6680, 6684, 6688, 6692, 6697,  
6701, 6705, 6709, 6713, 6717, 6721,  
6725, 6729, 6733, 6739, 6743, 6747,  
6751, 6755, 6759, 6763, 6768, 6772,  
6776, 6780, 6784, 6788, 6792,  
6798, 6824, 6942, 6949, 6953,

6957, 6961, 6965, 6969, 6973,  
6977, 6981, 6985, 6989, 6993,  
6997, 7001, 7006, 7011, 7016, 7020,  
7024, 7029, 7034, 7040, 7048, 7056,  
7062, 7069, 7074, 7085, 7090,  
7095, 7100, 7105, 7112, 7117, 7121,  
7129, 7133, 7137, 7141, 7146, 7150,  
7154, 7158, 7162, 7167, 7173, 7177,  
7181, 7185, 7190, 7194, 7198, 7202,  
7206, 7210, 7214, 7218, 7222, 7226,  
7230, 7235, 7239, 7244, 7249, 7253,  
7257, 7261, 7265, 7269, 7273, 7277,  
7281, 7285, 7291, 7297, 7301, 7305,  
7309, 7313, 7317, 7321, 7325, 7329,  
7333, 7337, 7341, 7345, 7349, 7353,  
7357, 7361, 7365, 7369, 7373, 7377,  
7383, 7391, 7395, 7399, 7405, 7411,  
7415, 7426, 7432, 7436, 7442, 7448,  
7452, 7456, 7460, 7464, 7468, 7472,  
7476, 7480, 7486, 7492, 7496, 7500,  
7504, 7508, 7512, 7516, 7520, 7524,  
7530, 7534, 7540, 7545, 7549, 7553,  
7557, 7561, 7565, 7569, 7573, 7577,  
7581, 7585, 7589, 7593, 7597, 7601,  
7605, 7609, 7613, 7617, 7621, 7625,  
7629, 7633, 7637, 7641, 7645, 7649,  
7653, 7659, 7666, 7670, 7674, 7678,  
7682, 7686, 7690, 7694, 7698, 7702,  
7706, 7710, 7714, 7718, 7722, 7726,  
7730, 7734, 7738, 7742, 7746, 7750,  
7754, 7758, 7762, 7766, 7770, 7774,  
7778, 7782, 7786, 7792, 7799, 7803,  
7807, 7811, 7815, 7819, 7823, 7827,  
7831, 7835, 7840, 7844, 7848, 7852,  
7856, 7860, 7864, 7868, 7872, 7876,  
7882, 7886, 7890, 7894, 7898,  
7902, 7906, 7911, 7915, 7919, 7923,  
7927, 7931, 7935, 7940, 7945, 7949,  
7953, 7957, 7961, 7965, 7969, 7974,  
7978, 7982, 7986, 7990, 7994,  
7998, 8002, 8006, 8010, 8016,  
8020, 8024, 8028, 8032, 8036,  
8040, 8045, 8049, 8053, 8057,  
8061, 8065, 8069, 8075, 8106,  
8224, 8231, 8235, 8239, 8243,  
8247, 8251, 8255, 8259, 8263,  
8267, 8271, 8275, 8279, 8283,  
8288, 8293, 8298, 8302, 8306,  
8311, 8316, 8322, 8330, 8338, 8344,  
8351, 8356, 8367, 8372, 8377,  
8382, 8387, 8394, 8399, 8403,  
8411, 8415, 8419, 8423, 8428, 8432,  
8436, 8440, 8444, 8449, 8455,  
8459, 8463, 8467, 8472, 8476,  
8480, 8484, 8488, 8492, 8496,  
8500, 8504, 8508, 8512, 8517, 8521,  
8526, 8531, 8535, 8539, 8543,  
8547, 8551, 8555, 8559, 8563,  
8567, 8573, 8579, 8583, 8587,  
8591, 8595, 8599, 8603, 8607,  
8611, 8615, 8619, 8623, 8627, 8631,  
8635, 8639, 8643, 8647, 8651,  
8655, 8659, 8665, 8673, 8677,  
8681, 8687, 8693, 8697, 8708,  
8714, 8718, 8724, 8730, 8734, 8738,  
8742, 8746, 8750, 8754, 8758, 8762,  
8768, 8774, 8778, 8782, 8786, 8790,  
8794, 8798, 8802, 8806, 8812,  
8816, 8822, 8827, 8831, 8835,  
8839, 8843, 8847, 8851, 8855,  
8859, 8863, 8867, 8871, 8875,  
8879, 8883, 8887, 8891, 8895,  
8899, 8903, 8907, 8911, 8915, 8919,  
8923, 8927, 8931, 8935, 8941,  
8948, 8952, 8956, 8960, 8964,  
8968, 8972, 8976, 8980, 8984,  
8988, 8992, 8996, 9000, 9004,  
9008, 9012, 9019, 9023, 9027,  
9031, 9035, 9039, 9043, 9047,  
9051, 9055, 9059, 9063, 9067,  
9071, 9077, 9084, 9088, 9092,  
9096, 9100, 9104, 9108, 9112, 9116,  
9120, 9125, 9129, 9133, 9137, 9141,  
9145, 9149, 9153, 9157, 9161, 9167,  
9171, 9175, 9179, 9183, 9187, 9191,  
9196, 9200, 9204, 9208, 9212, 9216,  
9220, 9225, 9230, 9234, 9238,  
9242, 9246, 9250, 9254, 9259,  
9263, 9267, 9271, 9275, 9279,  
9283, 9287, 9291, 9295, 9301,  
9305, 9309, 9313, 9317, 9321, 9325,  
9330, 9334, 9338, 9342, 9346,  
9350, 9354, 9360, 9425, 9430,  
9435, 9440, 9445, 9450, 9455,  
9460, 9465, 9470, 9475, 9480,  
9485, 9491, 9497, 9503, 9507, 9512,  
9519, 9524, 9530, 9535, 9540,  
9545, 9551, 9558, 9564, 9569, 9574,  
9579, 9584, 9589, 9594, 9599,  
9603, 9607, 9611, 9615, 9619, 9623,  
9627, 9631, 9635, 9640, 9646,  
9651, 9657, 9661, 9668, 9675,  
9681, 9687, 9693, 9699, 9705,  
9711, 9717, 9723, 9729, 9735, 9741,  
9748, 9754, 9759, 9764, 9768, 9772,  
9776, 9780, 9784, 9788, 9792,  
9796, 9800, 9804, 9808, 9813,  
9818, 9823, 9828, 9833, 9838,

9843, 9848, 9854, 9860, 9865,	11284, 11288, 11292, 11296, 11300,
9870, 9875, 9880, 9885, 9890,	11305, 11309, 11314, 11319, 11323,
9895, 9900, 9906, 9911, 9916,	11328, 11332, 11337, 11342, 11347,
9920, 9924, 9928, 9932, 9937,	11351, 11355, 11359, 11363, 11368,
9941, 9946, 9951, 9955, 9960,	11373, 11377, 11381, 11386, 11390,
9964, 9969, 9974, 9979, 9983,	11394, 11400, 11404, 11408, 11413,
9987, 9991, 9995, 10000, 10005,	11417, 11422, 11429, 11437, 11445, 11462
10009, 10013, 10018, 10022, 10026,	copyctan() (fn) . . . . . 4, 14
10032, 10036, 10040, 10044, 10050,	copysubctan() (fn) . . . . . 14
10058, 10111, 10116, 10121, 10126,	
10131, 10136, 10141, 10146, 10151,	
10156, 10161, 10166, 10171, 10177,	
10183, 10189, 10193, 10198, 10205,	
10210, 10216, 10221, 10226, 10231,	
10237, 10244, 10250, 10255, 10260,	
10265, 10270, 10275, 10280, 10285,	
10289, 10293, 10297, 10301, 10305,	
10309, 10313, 10317, 10321, 10326,	
10332, 10337, 10343, 10347, 10354,	
10361, 10367, 10373, 10379, 10385,	
10391, 10397, 10403, 10409, 10415,	
10421, 10427, 10434, 10440, 10445,	
10450, 10454, 10458, 10462, 10466,	
10470, 10474, 10478, 10482, 10486,	
10490, 10494, 10499, 10504, 10509,	
10514, 10519, 10524, 10529, 10534,	
10540, 10546, 10551, 10556, 10561,	
10566, 10571, 10576, 10581, 10586,	
10592, 10597, 10602, 10606, 10610,	
10614, 10618, 10623, 10627, 10632,	
10637, 10641, 10646, 10650, 10655,	
10660, 10665, 10669, 10673, 10677,	
10681, 10686, 10691, 10695, 10699,	
10704, 10708, 10712, 10718, 10722,	
10726, 10730, 10736, 10744, 10793,	
10798, 10803, 10808, 10813, 10818,	
10823, 10828, 10833, 10838, 10843,	
10848, 10853, 10859, 10865, 10871,	
10875, 10880, 10887, 10892, 10898,	
10903, 10908, 10913, 10919, 10926,	
10932, 10937, 10942, 10947, 10952,	
10957, 10962, 10967, 10971, 10975,	
10979, 10983, 10987, 10991, 10995,	
10999, 11003, 11008, 11014, 11019,	
11025, 11029, 11036, 11043, 11049,	
11055, 11061, 11067, 11073, 11079,	
11085, 11091, 11097, 11103, 11109,	
11116, 11122, 11127, 11132, 11136,	
11140, 11144, 11148, 11152, 11156,	
11160, 11164, 11168, 11172, 11176,	
11181, 11186, 11191, 11196, 11201,	
11206, 11211, 11216, 11222, 11228,	
11233, 11238, 11243, 11248, 11253,	
11258, 11263, 11268, 11274, 11279,	
	D
	\DefineFileInfoSVN . . . . . 4
	\depth . . . . . 506, 520, 1789, 1803, 3066, 3080, 4343, 4357, 5620, 5634, 6897, 6911, 8179, 8193
	\digit 376, 397, 401, 405, 439, 791, 796, 800, 804, 808, 812, 816, 820, 824, 828, 1722, 2076, 2081, 2085, 2089, 2093, 2097, 2101, 2105, 2109, 2113, 2999, 3353, 3358, 3362, 3366, 3370, 3374, 3378, 3382, 3386, 3390, 4276, 4630, 4635, 4639, 4643, 4647, 4651, 4655, 4659, 4663, 4667, 5553, 5907, 5912, 5916, 5920, 5924, 5928, 5932, 5936, 5940, 5944, 6830, 7184, 7189, 7193, 7197, 7201, 7205, 7209, 7213, 7217, 7221, 8112, 8466, 8471, 8475, 8479, 8483, 8487, 8491, 8495, 8499, 8503, 9375
	\div . . . . . 81
	\dj 1279, 2562, 3839, 5116, 6393, 7670, 8952
	docinit_hook() (fn) . . . . . 4, 14
	\documentclass . . . . . 5, 185
	dotoldstyle.etx (etx) . . . . . 374
	dotsc2.etx (etx) . . . . . 378
	dotscbuild.mtx (mtx) . . . . . 17
	dotscmisc.mtx (mtx) . . . . . 246
	dottaboldstyle.etx (etx) . . . . . 395
	E
	\Else . . . . . 83, 123, 174, 195, 362, 431, 443, 448, 461, 467, 469, 477, 485, 491, 493, 499, 505, 507, 513, 519, 521, 527, 553, 685, 895, 1009, 1025, 1046, 1090, 1265, 1398, 1714, 1726, 1731, 1744, 1750, 1752, 1760, 1768, 1774, 1776, 1782, 1788, 1790, 1796, 1802, 1804, 1810, 1836, 1970, 2180, 2294, 2310, 2331, 2375, 2548, 2681, 2991, 3003, 3008, 3021, 3027, 3029, 3037, 3045, 3051, 3053, 3059, 3065, 3067, 3073, 3079, 3081, 3087, 3113, 3247, 3457, 3571, 3587, 3608, 3652,

3825, 3958, 4268, 4280, 4285,  
 4298, 4304, 4306, 4314, 4322, 4328,  
 4330, 4336, 4342, 4344, 4350,  
 4356, 4358, 4364, 4390, 4524, 4734,  
 4848, 4864, 4885, 4929, 5102, 5235,  
 5545, 5557, 5562, 5575, 5581, 5583,  
 5591, 5599, 5605, 5607, 5613, 5619,  
 5621, 5627, 5633, 5635, 5641, 5667,  
 5801, 6011, 6125, 6141, 6162, 6206,  
 6379, 6512, 6822, 6834, 6839,  
 6852, 6858, 6860, 6868, 6876,  
 6882, 6884, 6890, 6896, 6898,  
 6904, 6910, 6912, 6918, 6944, 7078,  
 7288, 7402, 7418, 7439, 7483, 7656,  
 7789, 8104, 8116, 8121, 8134, 8140,  
 8142, 8150, 8158, 8164, 8166, 8172,  
 8178, 8180, 8186, 8192, 8194, 8200,  
 8226, 8360, 8570, 8684, 8700,  
 8721, 8765, 8938, 9074, 11415, 11460  
`\else` ..... 9400, 9406, 9408, 10086,  
 10092, 10094, 10766, 10772, 10774  
`\encoding` ... 375, 380, 396, 400, 404,  
 421, 1704, 2981, 4258, 5535, 6812,  
 8094, 9367, 9394, 10080, 10760, 11455  
`\end` ..... 57, 76  
`\endcomment` ..... 30, 77, 167  
`\endencoding` . 377, 394, 398, 402, 406,  
 1687, 2970, 4247, 5524, 6801, 8078,  
 9363, 9379, 10064, 10750, 11451, 11469  
`\endfor` ..... 229  
`\endmetrics` ..... 182, 244, 373  
`\endresetglyph` ..... 227  
`\endsetglyph` 36, 44, 125, 172, 177, 236,  
 258, 265, 277, 281, 289, 296, 303,  
 307, 319, 326, 333, 340, 352, 360, 368  
`\endsetslot` ..... 559,  
 563, 567, 571, 575, 579, 583, 587,  
 591, 595, 599, 603, 607, 612, 617,  
 622, 626, 630, 635, 640, 645, 653,  
 660, 666, 673, 678, 683, 694, 699,  
 704, 709, 714, 720, 725, 733, 737,  
 741, 745, 749, 754, 758, 762, 766,  
 770, 775, 781, 785, 789, 794, 798,  
 802, 806, 810, 814, 818, 822, 826,  
 830, 834, 838, 843, 847, 852, 857,  
 861, 865, 869, 873, 877, 881, 885,  
 889, 893, 899, 905, 909, 913, 917,  
 921, 925, 929, 933, 937, 941, 945,  
 949, 953, 957, 961, 965, 969, 973,  
 977, 981, 987, 994, 999, 1003, 1007,  
 1013, 1019, 1023, 1034, 1040, 1044,  
 1050, 1056, 1060, 1064, 1068, 1072,  
 1076, 1080, 1084, 1088, 1094, 1100,  
 1104, 1108, 1112, 1116, 1120, 1124,  
 1128, 1134, 1138, 1144, 1149, 1153,  
 1157, 1161, 1165, 1169, 1173, 1177,  
 1181, 1185, 1189, 1193, 1197, 1201,  
 1207, 1211, 1215, 1219, 1223, 1227,  
 1231, 1235, 1239, 1243, 1247, 1251,  
 1255, 1259, 1263, 1270, 1276, 1280,  
 1284, 1288, 1292, 1296, 1300, 1304,  
 1308, 1312, 1316, 1320, 1324, 1328,  
 1332, 1336, 1340, 1344, 1348, 1352,  
 1356, 1360, 1364, 1368, 1372, 1376,  
 1380, 1384, 1388, 1392, 1396, 1403,  
 1409, 1413, 1417, 1421, 1425, 1429,  
 1433, 1437, 1441, 1446, 1450, 1454,  
 1458, 1462, 1466, 1470, 1474, 1478,  
 1482, 1488, 1492, 1496, 1500, 1504,  
 1508, 1512, 1517, 1521, 1525, 1529,  
 1533, 1537, 1541, 1546, 1551, 1555,  
 1559, 1563, 1567, 1571, 1575, 1580,  
 1584, 1588, 1592, 1596, 1600, 1604,  
 1608, 1612, 1616, 1622, 1626, 1630,  
 1634, 1638, 1642, 1646, 1651, 1655,  
 1659, 1663, 1667, 1671, 1675, 1681,  
 1685, 1842, 1846, 1850, 1854, 1858,  
 1862, 1866, 1870, 1874, 1878, 1882,  
 1886, 1890, 1895, 1900, 1905, 1909,  
 1913, 1918, 1923, 1928, 1937, 1945,  
 1951, 1958, 1963, 1968, 1979, 1984,  
 1989, 1994, 1999, 2005, 2010, 2018,  
 2022, 2026, 2030, 2034, 2039,  
 2043, 2047, 2051, 2055, 2060,  
 2066, 2070, 2074, 2079, 2083,  
 2087, 2091, 2095, 2099, 2103,  
 2107, 2111, 2115, 2119, 2123, 2128,  
 2132, 2137, 2142, 2146, 2150, 2154,  
 2158, 2162, 2166, 2170, 2174, 2178,  
 2184, 2190, 2194, 2198, 2202, 2206,  
 2210, 2214, 2218, 2222, 2226, 2230,  
 2234, 2238, 2242, 2246, 2250,  
 2254, 2258, 2262, 2266, 2272,  
 2279, 2284, 2288, 2292, 2298,  
 2304, 2308, 2319, 2325, 2329,  
 2335, 2341, 2345, 2349, 2353,  
 2357, 2361, 2365, 2369, 2373,  
 2379, 2385, 2389, 2393, 2397,  
 2401, 2405, 2409, 2413, 2419, 2423,  
 2429, 2434, 2438, 2442, 2446, 2450,  
 2454, 2458, 2462, 2466, 2470, 2474,  
 2478, 2482, 2486, 2490, 2494,  
 2498, 2502, 2506, 2510, 2514, 2518,  
 2522, 2526, 2530, 2534, 2538,  
 2542, 2546, 2553, 2559, 2563,  
 2567, 2571, 2575, 2579, 2583, 2587,  
 2591, 2595, 2599, 2603, 2607, 2611,  
 2615, 2619, 2623, 2627, 2631, 2635,

2639, 2643, 2647, 2651, 2655,  
2659, 2663, 2667, 2671, 2675,  
2679, 2686, 2692, 2696, 2700,  
2704, 2708, 2712, 2716, 2720, 2724,  
2729, 2733, 2737, 2741, 2745, 2749,  
2753, 2757, 2761, 2765, 2771, 2775,  
2779, 2783, 2787, 2791, 2795, 2800,  
2804, 2808, 2812, 2816, 2820,  
2824, 2829, 2834, 2838, 2842,  
2846, 2850, 2854, 2858, 2863,  
2867, 2871, 2875, 2879, 2883, 2887,  
2891, 2895, 2899, 2905, 2909,  
2913, 2917, 2921, 2925, 2929, 2934,  
2938, 2942, 2946, 2950, 2954,  
2958, 2964, 2968, 3119, 3123, 3127,  
3131, 3135, 3139, 3143, 3147, 3151,  
3155, 3159, 3163, 3167, 3172, 3177,  
3182, 3186, 3190, 3195, 3200, 3205,  
3214, 3222, 3228, 3235, 3240,  
3245, 3256, 3261, 3266, 3271, 3276,  
3282, 3287, 3295, 3299, 3303,  
3307, 3311, 3316, 3320, 3324, 3328,  
3332, 3337, 3343, 3347, 3351,  
3356, 3360, 3364, 3368, 3372,  
3376, 3380, 3384, 3388, 3392,  
3396, 3400, 3405, 3409, 3414, 3419,  
3423, 3427, 3431, 3435, 3439, 3443,  
3447, 3451, 3455, 3461, 3467, 3471,  
3475, 3479, 3483, 3487, 3491, 3495,  
3499, 3503, 3507, 3511, 3515, 3519,  
3523, 3527, 3531, 3535, 3539,  
3543, 3549, 3556, 3561, 3565,  
3569, 3575, 3581, 3585, 3596,  
3602, 3606, 3612, 3618, 3622,  
3626, 3630, 3634, 3638, 3642,  
3646, 3650, 3656, 3662, 3666,  
3670, 3674, 3678, 3682, 3686,  
3690, 3696, 3700, 3706, 3711, 3715,  
3719, 3723, 3727, 3731, 3735, 3739,  
3743, 3747, 3751, 3755, 3759, 3763,  
3767, 3771, 3775, 3779, 3783, 3787,  
3791, 3795, 3799, 3803, 3807, 3811,  
3815, 3819, 3823, 3830, 3836,  
3840, 3844, 3848, 3852, 3856,  
3860, 3864, 3868, 3872, 3876,  
3880, 3884, 3888, 3892, 3896,  
3900, 3904, 3908, 3912, 3916,  
3920, 3924, 3928, 3932, 3936,  
3940, 3944, 3948, 3952, 3956,  
3963, 3969, 3973, 3977, 3981,  
3985, 3989, 3993, 3997, 4001,  
4006, 4010, 4014, 4018, 4022, 4026,  
4030, 4034, 4038, 4042, 4048,  
4052, 4056, 4060, 4064, 4068,  
4072, 4077, 4081, 4085, 4089, 4093,  
4097, 4101, 4106, 4111, 4115, 4119,  
4123, 4127, 4131, 4135, 4140, 4144,  
4148, 4152, 4156, 4160, 4164, 4168,  
4172, 4176, 4182, 4186, 4190, 4194,  
4198, 4202, 4206, 4211, 4215, 4219,  
4223, 4227, 4231, 4235, 4241, 4245,  
4396, 4400, 4404, 4408, 4412, 4416,  
4420, 4424, 4428, 4432, 4436, 4440,  
4444, 4449, 4454, 4459, 4463, 4467,  
4472, 4477, 4482, 4491, 4499, 4505,  
4512, 4517, 4522, 4533, 4538, 4543,  
4548, 4553, 4559, 4564, 4572, 4576,  
4580, 4584, 4588, 4593, 4597,  
4601, 4605, 4609, 4614, 4620, 4624,  
4628, 4633, 4637, 4641, 4645, 4649,  
4653, 4657, 4661, 4665, 4669, 4673,  
4677, 4682, 4686, 4691, 4696, 4700,  
4704, 4708, 4712, 4716, 4720, 4724,  
4728, 4732, 4738, 4744, 4748, 4752,  
4756, 4760, 4764, 4768, 4772, 4776,  
4780, 4784, 4788, 4792, 4796, 4800,  
4804, 4808, 4812, 4816, 4820, 4826,  
4833, 4838, 4842, 4846, 4852,  
4858, 4862, 4873, 4879, 4883,  
4889, 4895, 4899, 4903, 4907,  
4911, 4915, 4919, 4923, 4927, 4933,  
4939, 4943, 4947, 4951, 4955, 4959,  
4963, 4967, 4973, 4977, 4983,  
4988, 4992, 4996, 5000, 5004,  
5008, 5012, 5016, 5020, 5024,  
5028, 5032, 5036, 5040, 5044,  
5048, 5052, 5056, 5060, 5064,  
5068, 5072, 5076, 5080, 5084,  
5088, 5092, 5096, 5100, 5107, 5113,  
5117, 5121, 5125, 5129, 5133, 5137,  
5141, 5145, 5149, 5153, 5157, 5161,  
5165, 5169, 5173, 5177, 5181, 5185,  
5189, 5193, 5197, 5201, 5205, 5209,  
5213, 5217, 5221, 5225, 5229, 5233,  
5240, 5246, 5250, 5254, 5258,  
5262, 5266, 5270, 5274, 5278,  
5283, 5287, 5291, 5295, 5299,  
5303, 5307, 5311, 5315, 5319, 5325,  
5329, 5333, 5337, 5341, 5345,  
5349, 5354, 5358, 5362, 5366,  
5370, 5374, 5378, 5383, 5388,  
5392, 5396, 5400, 5404, 5408,  
5412, 5417, 5421, 5425, 5429, 5433,  
5437, 5441, 5445, 5449, 5453, 5459,  
5463, 5467, 5471, 5475, 5479, 5483,  
5488, 5492, 5496, 5500, 5504,  
5508, 5512, 5518, 5522, 5673, 5677,  
5681, 5685, 5689, 5693, 5697,

5701, 5705, 5709, 5713, 5717, 5721,  
5726, 5731, 5736, 5740, 5744, 5749,  
5754, 5759, 5768, 5776, 5782, 5789,  
5794, 5799, 5810, 5815, 5820, 5825,  
5830, 5836, 5841, 5849, 5853,  
5857, 5861, 5865, 5870, 5874, 5878,  
5882, 5886, 5891, 5897, 5901,  
5905, 5910, 5914, 5918, 5922, 5926,  
5930, 5934, 5938, 5942, 5946,  
5950, 5954, 5959, 5963, 5968,  
5973, 5977, 5981, 5985, 5989,  
5993, 5997, 6001, 6005, 6009,  
6015, 6021, 6025, 6029, 6033,  
6037, 6041, 6045, 6049, 6053,  
6057, 6061, 6065, 6069, 6073,  
6077, 6081, 6085, 6089, 6093,  
6097, 6103, 6110, 6115, 6119, 6123,  
6129, 6135, 6139, 6150, 6156, 6160,  
6166, 6172, 6176, 6180, 6184, 6188,  
6192, 6196, 6200, 6204, 6210, 6216,  
6220, 6224, 6228, 6232, 6236,  
6240, 6244, 6250, 6254, 6260,  
6265, 6269, 6273, 6277, 6281,  
6285, 6289, 6293, 6297, 6301,  
6305, 6309, 6313, 6317, 6321, 6325,  
6329, 6333, 6337, 6341, 6345,  
6349, 6353, 6357, 6361, 6365,  
6369, 6373, 6377, 6384, 6390,  
6394, 6398, 6402, 6406, 6410,  
6414, 6418, 6422, 6426, 6430, 6434,  
6438, 6442, 6446, 6450, 6454,  
6458, 6462, 6466, 6470, 6474, 6478,  
6482, 6486, 6490, 6494, 6498,  
6502, 6506, 6510, 6517, 6523,  
6527, 6531, 6535, 6539, 6543,  
6547, 6551, 6555, 6560, 6564,  
6568, 6572, 6576, 6580, 6584,  
6588, 6592, 6596, 6602, 6606,  
6610, 6614, 6618, 6622, 6626, 6631,  
6635, 6639, 6643, 6647, 6651,  
6655, 6660, 6665, 6669, 6673,  
6677, 6681, 6685, 6689, 6694,  
6698, 6702, 6706, 6710, 6714, 6718,  
6722, 6726, 6730, 6736, 6740, 6744,  
6748, 6752, 6756, 6760, 6765, 6769,  
6773, 6777, 6781, 6785, 6789, 6795,  
6799, 6950, 6954, 6958, 6962,  
6966, 6970, 6974, 6978, 6982,  
6986, 6990, 6994, 6998, 7003,  
7008, 7013, 7017, 7021, 7026, 7031,  
7036, 7045, 7053, 7059, 7066,  
7071, 7076, 7087, 7092, 7097, 7102,  
7107, 7113, 7118, 7126, 7130, 7134,  
7138, 7142, 7147, 7151, 7155, 7159,  
7163, 7168, 7174, 7178, 7182, 7187,  
7191, 7195, 7199, 7203, 7207, 7211,  
7215, 7219, 7223, 7227, 7231, 7236,  
7240, 7245, 7250, 7254, 7258, 7262,  
7266, 7270, 7274, 7278, 7282, 7286,  
7292, 7298, 7302, 7306, 7310, 7314,  
7318, 7322, 7326, 7330, 7334, 7338,  
7342, 7346, 7350, 7354, 7358, 7362,  
7366, 7370, 7374, 7380, 7387, 7392,  
7396, 7400, 7406, 7412, 7416, 7427,  
7433, 7437, 7443, 7449, 7453, 7457,  
7461, 7465, 7469, 7473, 7477, 7481,  
7487, 7493, 7497, 7501, 7505, 7509,  
7513, 7517, 7521, 7527, 7531, 7537,  
7542, 7546, 7550, 7554, 7558, 7562,  
7566, 7570, 7574, 7578, 7582, 7586,  
7590, 7594, 7598, 7602, 7606,  
7610, 7614, 7618, 7622, 7626, 7630,  
7634, 7638, 7642, 7646, 7650, 7654,  
7661, 7667, 7671, 7675, 7679, 7683,  
7687, 7691, 7695, 7699, 7703, 7707,  
7711, 7715, 7719, 7723, 7727, 7731,  
7735, 7739, 7743, 7747, 7751, 7755,  
7759, 7763, 7767, 7771, 7775, 7779,  
7783, 7787, 7794, 7800, 7804, 7808,  
7812, 7816, 7820, 7824, 7828, 7832,  
7837, 7841, 7845, 7849, 7853, 7857,  
7861, 7865, 7869, 7873, 7879, 7883,  
7887, 7891, 7895, 7899, 7903, 7908,  
7912, 7916, 7920, 7924, 7928, 7932,  
7937, 7942, 7946, 7950, 7954, 7958,  
7962, 7966, 7971, 7975, 7979, 7983,  
7987, 7991, 7995, 7999, 8003,  
8007, 8013, 8017, 8021, 8025, 8029,  
8033, 8037, 8042, 8046, 8050,  
8054, 8058, 8062, 8066, 8072,  
8076, 8232, 8236, 8240, 8244,  
8248, 8252, 8256, 8260, 8264,  
8268, 8272, 8276, 8280, 8285,  
8290, 8295, 8299, 8303, 8308,  
8313, 8318, 8327, 8335, 8341, 8348,  
8353, 8358, 8369, 8374, 8379,  
8384, 8389, 8395, 8400, 8408,  
8412, 8416, 8420, 8424, 8429, 8433,  
8437, 8441, 8445, 8450, 8456, 8460,  
8464, 8469, 8473, 8477, 8481, 8485,  
8489, 8493, 8497, 8501, 8505,  
8509, 8513, 8518, 8522, 8527,  
8532, 8536, 8540, 8544, 8548,  
8552, 8556, 8560, 8564, 8568,  
8574, 8580, 8584, 8588, 8592,  
8596, 8600, 8604, 8608, 8612,  
8616, 8620, 8624, 8628, 8632,  
8636, 8640, 8644, 8648, 8652,

8656, 8662, 8669, 8674, 8678,  
 8682, 8688, 8694, 8698, 8709,  
 8715, 8719, 8725, 8731, 8735, 8739,  
 8743, 8747, 8751, 8755, 8759, 8763,  
 8769, 8775, 8779, 8783, 8787, 8791,  
 8795, 8799, 8803, 8809, 8813,  
 8819, 8824, 8828, 8832, 8836,  
 8840, 8844, 8848, 8852, 8856,  
 8860, 8864, 8868, 8872, 8876,  
 8880, 8884, 8888, 8892, 8896,  
 8900, 8904, 8908, 8912, 8916,  
 8920, 8924, 8928, 8932, 8936,  
 8943, 8949, 8953, 8957, 8961,  
 8965, 8969, 8973, 8977, 8981,  
 8985, 8989, 8993, 8997, 9001,  
 9005, 9009, 9016, 9020, 9024,  
 9028, 9032, 9036, 9040, 9044,  
 9048, 9052, 9056, 9060, 9064,  
 9068, 9072, 9079, 9085, 9089,  
 9093, 9097, 9101, 9105, 9109, 9113,  
 9117, 9122, 9126, 9130, 9134, 9138,  
 9142, 9146, 9150, 9154, 9158, 9164,  
 9168, 9172, 9176, 9180, 9184, 9188,  
 9193, 9197, 9201, 9205, 9209, 9213,  
 9217, 9222, 9227, 9231, 9235,  
 9239, 9243, 9247, 9251, 9256,  
 9260, 9264, 9268, 9272, 9276,  
 9280, 9284, 9288, 9292, 9298,  
 9302, 9306, 9310, 9314, 9318,  
 9322, 9327, 9331, 9335, 9339,  
 9343, 9347, 9351, 9357, 9361, 9427,  
 9432, 9437, 9442, 9447, 9452, 9457,  
 9462, 9467, 9472, 9477, 9482, 9487,  
 9493, 9499, 9504, 9508, 9515,  
 9521, 9526, 9532, 9537, 9542,  
 9547, 9554, 9560, 9565, 9570,  
 9575, 9580, 9585, 9590, 9595,  
 9600, 9604, 9608, 9612, 9616,  
 9620, 9624, 9628, 9632, 9636,  
 9642, 9647, 9653, 9658, 9664,  
 9671, 9677, 9683, 9689, 9695,  
 9701, 9707, 9713, 9719, 9725, 9731,  
 9737, 9744, 9750, 9756, 9761, 9765,  
 9769, 9773, 9777, 9781, 9785, 9789,  
 9793, 9797, 9801, 9805, 9810,  
 9815, 9820, 9825, 9830, 9835,  
 9840, 9845, 9851, 9857, 9862,  
 9867, 9872, 9877, 9882, 9887,  
 9892, 9897, 9902, 9908, 9913,  
 9917, 9921, 9925, 9929, 9934,  
 9938, 9943, 9948, 9952, 9957,  
 9961, 9966, 9971, 9976, 9980,  
 9984, 9988, 9992, 9997, 10002,  
 10006, 10010, 10015, 10019, 10023,  
 10029, 10033, 10037, 10041, 10045,  
 10054, 10062, 10113, 10118, 10123,  
 10128, 10133, 10138, 10143, 10148,  
 10153, 10158, 10163, 10168, 10173,  
 10179, 10185, 10190, 10194, 10201,  
 10207, 10212, 10218, 10223, 10228,  
 10233, 10240, 10246, 10251, 10256,  
 10261, 10266, 10271, 10276, 10281,  
 10286, 10290, 10294, 10298, 10302,  
 10306, 10310, 10314, 10318, 10322,  
 10328, 10333, 10339, 10344, 10350,  
 10357, 10363, 10369, 10375, 10381,  
 10387, 10393, 10399, 10405, 10411,  
 10417, 10423, 10430, 10436, 10442,  
 10447, 10451, 10455, 10459, 10463,  
 10467, 10471, 10475, 10479, 10483,  
 10487, 10491, 10496, 10501, 10506,  
 10511, 10516, 10521, 10526, 10531,  
 10537, 10543, 10548, 10553, 10558,  
 10563, 10568, 10573, 10578, 10583,  
 10588, 10594, 10599, 10603, 10607,  
 10611, 10615, 10620, 10624, 10629,  
 10634, 10638, 10643, 10647, 10652,  
 10657, 10662, 10666, 10670, 10674,  
 10678, 10683, 10688, 10692, 10696,  
 10701, 10705, 10709, 10715, 10719,  
 10723, 10727, 10731, 10740, 10748,  
 10795, 10800, 10805, 10810, 10815,  
 10820, 10825, 10830, 10835, 10840,  
 10845, 10850, 10855, 10861, 10867,  
 10872, 10876, 10883, 10889, 10894,  
 10900, 10905, 10910, 10915, 10922,  
 10928, 10933, 10938, 10943, 10948,  
 10953, 10958, 10963, 10968, 10972,  
 10976, 10980, 10984, 10988, 10992,  
 10996, 11000, 11004, 11010, 11015,  
 11021, 11026, 11032, 11039, 11045,  
 11051, 11057, 11063, 11069, 11075,  
 11081, 11087, 11093, 11099, 11105,  
 11112, 11118, 11124, 11129, 11133,  
 11137, 11141, 11145, 11149, 11153,  
 11157, 11161, 11165, 11169, 11173,  
 11178, 11183, 11188, 11193, 11198,  
 11203, 11208, 11213, 11219, 11225,  
 11230, 11235, 11240, 11245, 11250,  
 11255, 11260, 11265, 11270, 11276,  
 11281, 11285, 11289, 11293, 11297,  
 11302, 11306, 11311, 11316, 11320,  
 11325, 11329, 11334, 11339, 11344,  
 11348, 11352, 11356, 11360, 11365,  
 11370, 11374, 11378, 11383, 11387,  
 11391, 11397, 11401, 11405, 11409,  
 11414, 11418, 11426, 11433, 11441, 11449  
**extname()** (fn) . . . . . **14**

**F**

<b>familymakers</b> (var) . . . . .	<i>6, 14</i>
\Fi . . . . .	<i>38, 46, 85, 123, 127, 179,</i> <i>201, 228, 259, 266, 370, 371, 436,</i> <i>437, 450, 451, 453, 463, 471, 481,</i> <i>487, 495, 501, 509, 515, 523, 529,</i> <i>555, 691, 716, 901, 1015, 1032, 1036,</i> <i>1052, 1096, 1272, 1405, 1719, 1720,</i> <i>1733, 1734, 1736, 1746, 1754, 1764,</i> <i>1770, 1778, 1784, 1792, 1798, 1806,</i> <i>1812, 1838, 1976, 2001, 2186, 2300,</i> <i>2317, 2321, 2337, 2381, 2555, 2688,</i> <i>2996, 2997, 3010, 3011, 3013, 3023,</i> <i>3031, 3041, 3047, 3055, 3061, 3069,</i> <i>3075, 3083, 3089, 3115, 3253,</i> <i>3278, 3463, 3577, 3594, 3598,</i> <i>3614, 3658, 3832, 3965, 4273, 4274,</i> <i>4287, 4288, 4290, 4300, 4308,</i> <i>4318, 4324, 4332, 4338, 4346, 4352,</i> <i>4360, 4366, 4392, 4530, 4555,</i> <i>4740, 4854, 4871, 4875, 4891, 4935,</i> <i>5109, 5242, 5550, 5551, 5564, 5565,</i> <i>5567, 5577, 5585, 5595, 5601,</i> <i>5609, 5615, 5623, 5629, 5637,</i> <i>5643, 5669, 5807, 5832, 6017,</i> <i>6131, 6148, 6152, 6168, 6212, 6386,</i> <i>6519, 6827, 6828, 6841, 6842,</i> <i>6844, 6854, 6862, 6872, 6878,</i> <i>6886, 6892, 6900, 6906, 6914,</i> <i>6920, 6946, 7084, 7109, 7294, 7408,</i> <i>7425, 7429, 7445, 7489, 7663, 7796,</i> <i>8109, 8110, 8123, 8124, 8126, 8136,</i> <i>8144, 8154, 8160, 8168, 8174, 8182,</i> <i>8188, 8196, 8202, 8228, 8366,</i> <i>8391, 8576, 8690, 8707, 8711, 8727,</i> <i>8771, 8945, 9081, 11419, 11465, 11466</i>
\fi . . . . .	<i>312, 343, 344, 355, 392,</i> <i>9402, 9410, 10088, 10096, 10768, 10776</i>
<b>finst()</b> (fn) . . . . .	<i>3, 14</i>
<b>fnt-ctan.lua</b> (lua) . . . . .	<i>14</i>
<b>fnt-tables.tex</b> (tpt) . . . . .	<i>1</i>
<b>fnt_test()</b> (fn) . . . . .	<i>4, 14</i>
<b>fntkeeper()</b> (fn) . . . . .	<i>4, 14</i>
<b>fnttarg</b> (targ) . . . . .	<i>3, 14, 14</i>
<b>fnttestfds</b> (var) . . . . .	<i>6, 14</i>
font encodings:	
<b>dotoldstyle.etcx</b> . . . . .	<i>374</i>
<b>dotsc2.etcx</b> . . . . .	<i>378</i>
<b>dottaboldstyle.etcx</b> . . . . .	<i>395</i>
<b>lining.etcx</b> . . . . .	<i>399</i>
<b>oldstyle.etcx</b> . . . . .	<i>403</i>
<b>t1-cfr.etcx</b> . . . . .	<i>407</i>
<b>t1-dotalt-f_f</b> . . . . .	<i>1688</i>
<b>t1-dotinf.etcx</b> . . . . .	<i>2971</i>

<b>t1-dotinferior.etcx</b> . . . . .	<i>4248</i>
<b>t1-dotsup.etcx</b> . . . . .	<i>5525</i>
<b>t1-dotsuperior.etcx</b> . . . . .	<i>6802</i>
<b>t1-f_f.etcx</b> . . . . .	<i>8079</i>
<b>t1j-f_f.etcx</b> . . . . .	<i>9364</i>
<b>ts1-dotinf.etcx</b> . . . . .	<i>9380</i>
<b>ts1-dotsup.etcx</b> . . . . .	<i>10066</i>
<b>ts1-euro.etcx</b> . . . . .	<i>10752</i>
<b>ucdotalt.etcx</b> . . . . .	<i>11454</i>

font metrics:

<b>dotscbuild.mtx</b> . . . . .	<i>17</i>
<b>dotscmisc.mtx</b> . . . . .	<i>246</i>
<b>newlatin-dotsc.mtx</b> . . . . .	<i>183</i>
<b>fontinst()</b> (fn) . . . . .	<i>3, 14</i>
<b>fontinst.lua</b> (lua) . . . . .	<i>14</i>
\foreach . . . . .	<i>221</i>

functions:

<b>checkinit_hook()</b> . . . . .	<i>4, 14</i>
<b>copyctan()</b> . . . . .	<i>4, 14</i>
<b>copysubctan()</b> . . . . .	<i>14</i>
<b>docinit_hook()</b> . . . . .	<i>4, 14</i>
<b>extname()</b> . . . . .	<i>14</i>
<b>finst()</b> . . . . .	<i>3, 14</i>
<b>fnt_test()</b> . . . . .	<i>4, 14</i>
<b>fntkeeper()</b> . . . . .	<i>4, 14</i>
<b>fontinst()</b> . . . . .	<i>3, 14</i>
<b>uniquify()</b> . . . . .	<i>4, 14</i>

**G**

\glyph . . . . .	<i>122, 124, 171, 176, 225, 234,</i> <i>256, 263, 274, 276, 280, 286, 288,</i> <i>295, 300, 302, 306, 316, 318, 325,</i> <i>330, 332, 339, 349, 351, 359, 365, 367</i>
\guillemotleft . . . . .	<i>638,</i> <i>1921, 3198, 4475, 5752, 7029, 8311</i>
\guillemotright . . . . .	<i>643,</i> <i>1926, 3203, 4480, 5757, 7034, 8316</i>
\guilsinglleft . . . . .	<i>615,</i> <i>1898, 3175, 4452, 5729, 7006, 8288</i>
\guilsinglright . . . . .	<i>620,</i> <i>1903, 3180, 4457, 5734, 7011, 8293</i>

**H**

\H . . . . .	<i>578, 1210,</i> <i>1242, 1343, 1375, 1861, 2493, 2525,</i> <i>2626, 2658, 3138, 3770, 3802,</i> <i>3903, 3935, 4415, 5047, 5079, 5180,</i> <i>5212, 5692, 6324, 6356, 6457,</i> <i>6489, 6969, 7601, 7633, 7734,</i> <i>7766, 8251, 8883, 8915, 9019, 9051</i>
\half . . . . .	<i>233</i>
\height . . . . .	<i>81, 460,</i> <i>484, 490, 498, 512, 1743, 1767, 1773,</i> <i>1781, 1795, 3020, 3044, 3050, 3058,</i>

<b>I</b>	
\i	676, 677, 1603, 1607, 1611, 1615, 1961, 1962, 2886, 2890, 2894, 2898, 3238, 3239, 4163, 4167, 4171, 4175, 4515, 4516, 5440, 5444, 5448, 5452, 5792, 5793, 6717, 6721, 6725, 6729, 7069, 7070, 7994, 7998, 8002, 8006, 8351, 8352, 9279, 9283, 9287, 9291
\ifareglyphs	33, 41, 79, 120, 347
\ifisglyph	169, 174, 223, 254, 261, 271, 284, 314, 357, 363, 459, 465, 467, 483, 489, 497, 505, 511, 519, 525, 1742, 1748, 1750, 1766, 1772, 1780, 1788, 1794, 1802, 1808, 3019, 3025, 3027, 3043, 3049, 3057, 3065, 3071, 3079, 3085, 4296, 4302, 4304, 4320, 4326, 4334, 4342, 4348, 4356, 4362, 5573, 5579, 5581, 5597, 5603, 5611, 5619, 5625, 5633, 5639, 6850, 6856, 6858, 6874, 6880, 6888, 6896, 6902, 6910, 6916, 8132, 8138, 8140, 8156, 8162, 8170, 8178, 8184, 8192, 8198, 9398, 9404, 9406, 10084, 10090, 10092, 10764, 10770, 10772, 11411
\ifisint	123, 390, 430, 441, 447, 473, 491, 503, 517, 1713, 1724, 1730, 1756, 1774, 1786, 1800, 2990, 3001, 3007, 3033, 3051, 3063, 3077, 4267, 4278, 4284, 4310, 4328, 4340, 4354, 5544, 5555, 5561, 5587, 5605, 5617, 5631, 6821, 6832, 6838, 6864, 6882, 6894, 6908, 8103, 8114, 8120, 8146, 8164, 8176, 8190, 11459
\ifnumber	431, 448, 550, 685, 688, 895, 1009, 1025, 1028, 1046, 1090, 1265, 1398, 1714, 1731, 1833, 1970, 1973, 2180, 2294, 2310, 2313, 2331, 2375, 2548, 2681, 2991, 3008, 3110, 3247, 3250, 3457, 3571, 3587, 3590, 3608, 3652, 3825, 3958, 4268, 4285, 4387, 4524, 4527, 4734, 4848, 4864, 4867, 4885, 4929, 5102, 5235, 5545, 5562, 5664, 5801, 5804, 6011, 6125, 6141, 6144, 6162, 6206, 6379, 6512, 6822, 6839, 6867, 6869, 6870, 6871, 6883, 6895, 6909, 6941, 7078, 7081, 7288, 7402, 7418, 7421, 7439, 7483, 7656, 7789, 8104, 8121, 8149, 8151, 8152, 8153, 8165, 8177, 8191, 8223, 8360, 8363, 8570, 8684, 8700, 8703, 8721, 8765, 8938, 9074, 9415, 9416, 9419, 9421, 10101, 10102, 10105, 10107, 10782, 10783, 10786, 10788, 11460
<b>J</b>	
\j	681, 682, 1966, 1967, 3243, 3244, 4520, 4521, 5797, 5798, 7074, 7075, 8356, 8357
<b>K</b>	
\k	606, 1156, 1176, 1291, 1311, 1889, 2441, 2461, 2574, 2594, 3166, 3718, 3738, 3851, 3871, 4443, 4995, 5015, 5128, 5148, 5720, 6272, 6292, 6405, 6425, 6997, 7549, 7569, 7682, 7702, 8279, 8831, 8851, 8964, 8984
keepdir (var)	6, 14
keepfiles (var)	6, 14
keeptempdir (var)	6, 14
keeptempfiles (var)	6, 14
\kerning	275, 287, 301, 317, 331, 350, 366
<b>L</b>	
\L	1192, 2477, 3754, 5031, 6308, 7585, 8867
\l	1327, 2610, 3887, 5164, 6441, 7718, 9000

\lc	.....	382, 425, 557, 561, 565, 569, 573, 577, 581, 585, 589, 593, 597, 601, 605, 675, 680, 689, 690, 1001, 1005, 1011, 1017, 1021, 1027, 1029, 1030, 1031, 1038, 1042, 1048, 1054, 1058, 1062, 1066, 1070, 1074, 1078, 1082, 1086, 1092, 1098, 1102, 1106, 1110, 1114, 1118, 1122, 1278, 1290, 1310, 1322, 1326, 1338, 1362, 1370, 1577, 1582, 1618, 1648, 1653, 1677, 1683, 1708, 1840, 1844, 1848, 1852, 1856, 1860, 1864, 1868, 1872, 1876, 1880, 1884, 1888, 1960, 1965, 1974, 1975, 2286, 2290, 2296, 2302, 2306, 2312, 2314, 2315, 2316, 2323, 2327, 2333, 2339, 2343, 2347, 2351, 2355, 2359, 2363, 2367, 2371, 2377, 2383, 2387, 2391, 2395, 2399, 2403, 2407, 2561, 2573, 2593, 2605, 2609, 2621, 2645, 2653, 2860, 2865, 2901, 2931, 2936, 2960, 2966, 2985, 3117, 3121, 3125, 3129, 3133, 3137, 3141, 3145, 3149, 3153, 3157, 3161, 3165, 3237, 3242, 3251, 3252, 3563, 3567, 3573, 3579, 3583, 3589, 3591, 3592, 3593, 3600, 3604, 3610, 3616, 3620, 3624, 3628, 3632, 3636, 3640, 3644, 3648, 3654, 3660, 3664, 3668, 3672, 3676, 3680, 3684, 3838, 3850, 3870, 3882, 3886, 3898, 3922, 3930, 4137, 4142, 4178, 4208, 4213, 4237, 4243, 4262, 4394, 4398, 4402, 4406, 4410, 4414, 4418, 4422, 4426, 4430, 4434, 4438, 4442, 4514, 4519, 4528, 4529, 4840, 4844, 4850, 4856, 4860, 4866, 4868, 4869, 4870, 4877, 4881, 4887, 4893, 4897, 4901, 4905, 4909, 4913, 4917, 4921, 4925, 4931, 4937, 4941, 4945, 4949, 4953, 4957, 4961, 5115, 5127, 5147, 5159, 5163, 5175, 5199, 5207, 5414, 5419, 5455, 5485, 5490, 5514, 5520, 5539, 5671, 5675, 5679, 5683, 5687, 5691, 5695, 5699, 5703, 5707, 5711, 5715, 5719, 5791, 5796, 5805, 5806, 6117, 6121, 6127, 6133, 6137, 6143, 6145, 6146, 6147, 6154, 6158, 6164, 6170, 6174, 6178, 6182, 6186, 6190, 6194, 6198, 6202, 6208, 6214, 6218, 6222, 6226, 6230, 6234, 6238, 6392, 6404, 6424, 6436, 6440, 6452, 6476, 6484,	6691, 6696, 6732, 6762, 6767, 6791, 6797, 6816, 6948, 6952, 6956, 6960, 6964, 6968, 6972, 6976, 6980, 6984, 6988, 6992, 6996, 7068, 7073, 7082, 7083, 7394, 7398, 7404, 7410, 7414, 7420, 7422, 7423, 7424, 7431, 7435, 7441, 7447, 7451, 7455, 7459, 7463, 7467, 7471, 7475, 7479, 7485, 7491, 7495, 7499, 7503, 7507, 7511, 7515, 7669, 7681, 7701, 7713, 7717, 7729, 7753, 7761, 7968, 7973, 8009, 8039, 8044, 8068, 8074, 8098, 8230, 8234, 8238, 8242, 8246, 8250, 8254, 8258, 8262, 8266, 8270, 8274, 8278, 8350, 8355, 8364, 8365, 8676, 8680, 8686, 8692, 8696, 8702, 8704, 8705, 8706, 8713, 8717, 8723, 8729, 8733, 8737, 8741, 8745, 8749, 8753, 8757, 8761, 8767, 8773, 8777, 8781, 8785, 8789, 8793, 8797, 8951, 8963, 8983, 8995, 8999, 9011, 9038, 9046, 9253, 9258, 9294, 9324, 9329, 9353, 9359, 9369
\lclig	.....	386, 429, 687, 689, 690, 696, 701, 706, 711, 1029, 1030, 1031, 1400, 1712, 1972, 1974, 1975, 1981, 1986, 1991, 1996, 2314, 2315, 2316, 2683, 2989, 3249, 3251, 3252, 3258, 3263, 3268, 3273, 3591, 3592, 3593, 3960, 4266, 4526, 4528, 4529, 4535, 4540, 4545, 4550, 4868, 4869, 4870, 5237, 5543, 5803, 5805, 5806, 5812, 5817, 5822, 5827, 6145, 6146, 6147, 6514, 6820, 7080, 7082, 7083, 7089, 7094, 7099, 7104, 7422, 7423, 7424, 7791, 8102, 8362, 8364, 8365, 8371, 8376, 8381, 8386, 8704, 8705, 8706, 9076, 9373	
\lctop	384, 427, 1286, 1294, 1298, 1302, 1306, 1314, 1318, 1330, 1334, 1342, 1346, 1350, 1354, 1358, 1366, 1374, 1378, 1382, 1386, 1390, 1394, 1553, 1557, 1561, 1565, 1569, 1573, 1586, 1590, 1594, 1598, 1602, 1606, 1610, 1614, 1624, 1628, 1632, 1636, 1640, 1644, 1657, 1661, 1665, 1669, 1673, 1710, 2569, 2577, 2581, 2585, 2589, 2597, 2601, 2613, 2617, 2625, 2629, 2633, 2637, 2641, 2649, 2657, 2661, 2665, 2669, 2673, 2677, 2836, 2840, 2844, 2848, 2852, 2856, 2869, 2873, 2877, 2881, 2885,		

2889, 2893, 2897, 2907, 2911, 2915,	4591, 4612, 4617, 4618, 4680, 4689,
2919, 2923, 2927, 2940, 2944,	4694, 4836, 4868, 4869, 4870,
2948, 2952, 2956, 2987, 3846,	5762, 5805, 5806, 5839, 5868,
3854, 3858, 3862, 3866, 3874,	5889, 5894, 5895, 5957, 5966,
3878, 3890, 3894, 3902, 3906,	5971, 6113, 6145, 6146, 6147, 7039,
3910, 3914, 3918, 3926, 3934, 3938,	7082, 7083, 7116, 7145, 7166, 7171,
3942, 3946, 3950, 3954, 4113, 4117,	7172, 7234, 7243, 7248, 7390, 7422,
4121, 4125, 4129, 4133, 4146, 4150,	7423, 7424, 8321, 8364, 8365, 8398,
4154, 4158, 4162, 4166, 4170, 4174,	8427, 8448, 8453, 8454, 8516,
4184, 4188, 4192, 4196, 4200, 4204,	8525, 8530, 8672, 8704, 8705, 8706
4217, 4221, 4225, 4229, 4233, 4264,	lining.etcx (etcx) . . . . . 399
5123, 5131, 5135, 5139, 5143, 5151,	lua script fragments:
5155, 5167, 5171, 5179, 5183, 5187,	fnt-ctan.lua . . . . . 14
5191, 5195, 5203, 5211, 5215, 5219,	fontinst.lua . . . . . 14
5223, 5227, 5231, 5390, 5394,	tag.lua . . . . . 14
5398, 5402, 5406, 5410, 5423, 5427,	
5431, 5435, 5439, 5443, 5447, 5451,	
5461, 5465, 5469, 5473, 5477, 5481,	
5494, 5498, 5502, 5506, 5510, 5541,	
6400, 6408, 6412, 6416, 6420, 6428,	M
6432, 6444, 6448, 6456, 6460,	\macroparameter 53, 54, 55, 56, 72, 73, 74, 75
6464, 6468, 6472, 6480, 6488,	\mapmakers (var) . . . . . 6, 14
6492, 6496, 6500, 6504, 6508,	\medskip . . . . . 48
6667, 6671, 6675, 6679, 6683,	\metrics . . . . . 19, 187, 248
6687, 6700, 6704, 6708, 6712, 6716,	\movert . . . . . 123, 233,
6720, 6724, 6728, 6738, 6742, 6746,	235, 275, 287, 301, 317, 331, 350, 366
6750, 6754, 6758, 6771, 6775, 6779,	\mul . . . . . 81
6783, 6787, 6818, 7677, 7685, 7689,	
7693, 7697, 7705, 7709, 7721, 7725,	N
7733, 7737, 7741, 7745, 7749, 7757,	\needsfontinstversion 21, 189, 250, 423,
7765, 7769, 7773, 7777, 7781, 7785,	1706, 2983, 4260, 5537, 6814, 8096
7944, 7948, 7952, 7956, 7960, 7964,	\neg . . . . . 504, 518,
7977, 7981, 7985, 7989, 7993, 7997,	1787, 1801, 3064, 3078, 4341, 4355,
8001, 8005, 8015, 8019, 8023,	5618, 5632, 6895, 6909, 8177, 8191
8027, 8031, 8035, 8048, 8052,	\newcommand . . . . . 8
8056, 8060, 8064, 8100, 8959,	newlatin-dotsc.mtx (mtx) . . . . . 183
8967, 8971, 8975, 8979, 8987,	\newtie . . . . . 9540, 10226, 10908
8991, 9003, 9007, 9018, 9022,	\nextslot . . . . . 9423, 9489,
9026, 9030, 9034, 9042, 9050,	9495, 9501, 9510, 9517, 9528, 9549,
9054, 9058, 9062, 9066, 9070,	9556, 9562, 9567, 9572, 9577,
9229, 9233, 9237, 9241, 9245,	9582, 9587, 9592, 9597, 9638,
9249, 9262, 9266, 9270, 9274,	9644, 9649, 9655, 9660, 9666,
9278, 9282, 9286, 9290, 9300,	9673, 9679, 9685, 9691, 9697,
9304, 9308, 9312, 9316, 9320,	9703, 9709, 9715, 9721, 9727, 9733,
9333, 9337, 9341, 9345, 9349, 9371	9739, 9746, 9752, 9904, 10048,
\ligature . . . . . 648,	10056, 10109, 10175, 10181, 10187,
689, 690, 723, 752, 773, 778, 779,	10196, 10203, 10214, 10235, 10242,
841, 850, 855, 997, 1029, 1030,	10248, 10253, 10258, 10263, 10268,
1031, 1931, 1974, 1975, 2008, 2037,	10273, 10278, 10283, 10324, 10330,
2058, 2063, 2064, 2126, 2135, 2140,	10335, 10341, 10346, 10352, 10359,
2282, 2314, 2315, 2316, 3208, 3251,	10365, 10371, 10377, 10383, 10389,
3252, 3285, 3314, 3335, 3340, 3341,	10395, 10401, 10407, 10413, 10419,
3403, 3412, 3417, 3559, 3591, 3592,	10425, 10432, 10438, 10590, 10734,
3593, 4485, 4528, 4529, 4562,	10742, 10791, 10857, 10863, 10869,
	10878, 10885, 10896, 10917, 10924,
	10930, 10935, 10940, 10945, 10950,
	10955, 10960, 10965, 11006, 11012,

11017, 11023, 11028, 11034, 11041,	3939, 4000, 4134, 4419, 5083,
11047, 11053, 11059, 11065, 11071,	5216, 5277, 5411, 5696, 6360, 6493,
11077, 11083, 11089, 11095, 11101,	6554, 6688, 6973, 7637, 7770, 7831,
11107, 11114, 11120, 11272, 11435, 11443	7965, 8255, 8919, 9055, 9116, 9250
\NG 1204, 2489, 3766, 5043, 6320, 7597, 8879	\relax ..... 17,
\ng 1339, 2622, 3899, 5176, 6453, 7730, 9012	183, 246, 374, 378, 395, 399, 403,
\noindent ..... 9	420, 1703, 2980, 4257, 5534, 6811,
 <b>O</b>	8093, 9364, 9392, 10078, 10759, 11454
\O 1520, 2803, 4080, 5357, 6634, 7911, 9196	\RequirePackage ..... 2
\o 1654, 2937, 4214, 5491, 6768, 8045, 9330	\resetcommand ..... 61, 66
\OE 1515, 2798, 4075, 5352, 6629, 7906, 9191	\resetdepth ..... 226
\oe ..... 1649,	\resetglyph ..... 224
2932, 4209, 5486, 6763, 8040, 9325	\revinfo ..... 3
oldstyle.etc (etc) ..... 403	 <b>S</b>
\oldstylenums 9599, 9603, 9607, 9611,	\sampletable ..... 8
9615, 9619, 9623, 9627, 9631, 9635,	\scale ..... 478, 479, 480,
10285, 10289, 10293, 10297, 10301,	1761, 1762, 1763, 3038, 3039, 3040,
10305, 10309, 10313, 10317, 10321,	4315, 4316, 4317, 5592, 5593, 5594,
10967, 10971, 10975, 10979, 10983,	6869, 6870, 6871, 8151, 8152, 8153
10987, 10991, 10995, 10999, 11003	\section ..... 27
\otherhalf ..... 235	\setcommand .... 32, 40, 376, 382, 383,
\outFileName ..... 3	384, 385, 386, 387, 397, 401, 405,
 <b>P</b>	425, 426, 427, 428, 429, 432, 434,
\par ..... 9, 56, 445,	438, 439, 1708, 1709, 1710, 1711,
1728, 3005, 4282, 5559, 6836, 8118	1712, 1715, 1717, 1721, 1722, 2985,
\partial ..... 1620,	2986, 2987, 2988, 2989, 2992,
2903, 4180, 5457, 6734, 8011, 9296	2994, 2998, 2999, 4262, 4263,
\pdftracingfonts ..... 1	4264, 4265, 4266, 4269, 4271, 4275,
\plain . 616, 621, 639, 644, 1204, 1339,	4276, 5539, 5540, 5541, 5542, 5543,
1487, 1545, 1621, 1680, 1899, 1904,	5546, 5548, 5552, 5553, 6816, 6817,
1922, 1927, 2489, 2622, 2770, 2828,	6818, 6819, 6820, 6823, 6825,
2904, 2963, 3176, 3181, 3199, 3204,	6829, 6830, 8098, 8099, 8100,
3766, 3899, 4047, 4105, 4181, 4240,	8101, 8102, 8105, 8107, 8111, 8112,
4453, 4458, 4476, 4481, 5043, 5176,	9369, 9370, 9371, 9372, 9373, 9374,
5324, 5382, 5458, 5517, 5730, 5735,	9375, 11457, 11458, 11461, 11463, 11467
5753, 5758, 6320, 6453, 6601,	\setcscbotglyph ..... 40, 55, 66, 74, 93, 108, 145, 148
6659, 6735, 6794, 7007, 7012, 7030,	\setcstopglyph .... 32, 53, 61, 72,
7035, 7597, 7730, 7878, 7936,	88, 89, 90, 91, 92, 94, 95, 97, 98,
8012, 8071, 8289, 8294, 8312, 8317,	99, 101, 103, 104, 105, 106, 107, 110,
8879, 9013, 9163, 9221, 9297, 9356	112, 113, 114, 115, 116, 118, 129, 130,
\ProvidesFileSVN ..... 3	131, 133, 134, 135, 136, 137, 138,
\ProvidesMtxPackage ..... 24, 252	140, 141, 143, 144, 147, 150, 151, 152,
 <b>Q</b>	153, 154, 155, 157, 158, 160, 161, 162
\quotedblbase ..... 633,	\setfontdimen 533, 534, 535, 536, 537,
1916, 3193, 4470, 5747, 7024, 8306	538, 539, 540, 541, 542, 543, 544,
\quotesinglbase ..... 610,	545, 546, 547, 548, 1816, 1817, 1818,
1893, 3170, 4447, 5724, 7001, 8283	1819, 1820, 1821, 1822, 1823, 1824,
 <b>R</b>	1825, 1826, 1827, 1828, 1829, 1830,
\r ..... 582,	1831, 3093, 3094, 3095, 3096,
1246, 1379, 1440, 1574, 1865, 2529,	3097, 3098, 3099, 3100, 3101, 3102,
2662, 2723, 2857, 3142, 3806,	3103, 3104, 3105, 3106, 3107, 3108,
	4370, 4371, 4372, 4373, 4374, 4375,

4376, 4377, 4378, 4379, 4380, 4381,  
 4382, 4383, 4384, 4385, 5647,  
 5648, 5649, 5650, 5651, 5652,  
 5653, 5654, 5655, 5656, 5657,  
 5658, 5659, 5660, 5661, 5662,  
 6924, 6925, 6926, 6927, 6928,  
 6929, 6930, 6931, 6932, 6933,  
 6934, 6935, 6936, 6937, 6938,  
 6939, 8206, 8207, 8208, 8209,  
 8210, 8211, 8212, 8213, 8214, 8215,  
 8216, 8217, 8218, 8219, 8220, 8221  
**\setglyph** . . . 34, 42, 121, 170, 175, 232,  
     255, 262, 273, 279, 285, 294, 299,  
     305, 315, 324, 329, 338, 348, 358, 364  
**\setint** . . . 80, 84, 269, 391, 442, 449,  
     452, 455, 456, 457, 460, 462, 466,  
     468, 470, 474, 475, 476, 478, 479,  
     480, 484, 486, 490, 492, 494, 498,  
     500, 504, 506, 508, 512, 514, 518,  
     520, 522, 526, 528, 531, 1725, 1732,  
     1735, 1738, 1739, 1740, 1743, 1745,  
     1749, 1751, 1753, 1757, 1758, 1759,  
     1761, 1762, 1763, 1767, 1769, 1773,  
     1775, 1777, 1781, 1783, 1787, 1789,  
     1791, 1795, 1797, 1801, 1803, 1805,  
     1809, 1811, 1814, 3002, 3009, 3012,  
     3015, 3016, 3017, 3020, 3022, 3026,  
     3028, 3030, 3034, 3035, 3036,  
     3038, 3039, 3040, 3044, 3046,  
     3050, 3052, 3054, 3058, 3060,  
     3064, 3066, 3068, 3072, 3074,  
     3078, 3080, 3082, 3086, 3088,  
     3091, 4279, 4286, 4289, 4292,  
     4293, 4294, 4297, 4299, 4303,  
     4305, 4307, 4311, 4312, 4313, 4315,  
     4316, 4317, 4321, 4323, 4327, 4329,  
     4331, 4335, 4337, 4341, 4343, 4345,  
     4349, 4351, 4355, 4357, 4359, 4363,  
     4365, 4368, 5556, 5563, 5566,  
     5569, 5570, 5571, 5574, 5576, 5580,  
     5582, 5584, 5588, 5589, 5590,  
     5592, 5593, 5594, 5598, 5600,  
     5604, 5606, 5608, 5612, 5614, 5618,  
     5620, 5622, 5626, 5628, 5632,  
     5634, 5636, 5640, 5642, 5645,  
     6833, 6840, 6843, 6846, 6847,  
     6848, 6851, 6853, 6857, 6859,  
     6861, 6865, 6866, 6867, 6869,  
     6870, 6871, 6875, 6877, 6881, 6883,  
     6885, 6889, 6891, 6895, 6897,  
     6899, 6903, 6905, 6909, 6911,  
     6913, 6917, 6919, 6922, 8115, 8122,  
     8125, 8128, 8129, 8130, 8133, 8135,  
     8139, 8141, 8143, 8147, 8148, 8149,  
     8151, 8152, 8153, 8157, 8159, 8163,  
     8165, 8167, 8171, 8173, 8177, 8179,  
     8181, 8185, 8187, 8191, 8193, 8195,  
     8199, 8201, 8204, 9399, 9401, 9405,  
     9407, 9409, 9412, 9415, 9416, 9417,  
     9418, 9419, 9420, 9421, 10085,  
     10087, 10091, 10093, 10095, 10098,  
     10101, 10102, 10103, 10104, 10105,  
     10106, 10107, 10765, 10767, 10771,  
     10773, 10775, 10779, 10782, 10783,  
     10784, 10785, 10786, 10787, 10788  
**\setleftkerning** . . . . .  
     126, 240, 241, 291, 310, 321, 335, 353  
**\setleftrightkerning** . . . . . 37,  
     45, 64, 69, 173, 178, 257, 264, 361, 369  
**\setrightkerning** . . . . . 278, 282, 292,  
     297, 308, 311, 322, 327, 336, 341, 354  
**\setslot** . . . . . 557,  
     561, 565, 569, 573, 577, 581, 585,  
     589, 593, 597, 601, 605, 609, 614,  
     619, 624, 628, 632, 637, 642, 647,  
     655, 662, 668, 675, 680, 687, 696,  
     701, 706, 711, 718, 722, 727, 735,  
     739, 743, 747, 751, 756, 760, 764,  
     768, 772, 777, 783, 787, 791, 796,  
     800, 804, 808, 812, 816, 820, 824,  
     828, 832, 836, 840, 845, 849, 854,  
     859, 863, 867, 871, 875, 879, 883,  
     887, 891, 897, 903, 907, 911, 915,  
     919, 923, 927, 931, 935, 939, 943,  
     947, 951, 955, 959, 963, 967, 971,  
     975, 979, 983, 989, 996, 1001, 1005,  
     1011, 1017, 1021, 1027, 1038, 1042,  
     1048, 1054, 1058, 1062, 1066, 1070,  
     1074, 1078, 1082, 1086, 1092, 1098,  
     1102, 1106, 1110, 1114, 1118, 1122,  
     1126, 1130, 1136, 1140, 1146, 1151,  
     1155, 1159, 1163, 1167, 1171, 1175,  
     1179, 1183, 1187, 1191, 1195, 1199,  
     1203, 1209, 1213, 1217, 1221, 1225,  
     1229, 1233, 1237, 1241, 1245, 1249,  
     1253, 1257, 1261, 1267, 1274, 1278,  
     1282, 1286, 1290, 1294, 1298, 1302,  
     1306, 1310, 1314, 1318, 1322, 1326,  
     1330, 1334, 1338, 1342, 1346, 1350,  
     1354, 1358, 1362, 1366, 1370, 1374,  
     1378, 1382, 1386, 1390, 1394, 1400,  
     1407, 1411, 1415, 1419, 1423, 1427,  
     1431, 1435, 1439, 1443, 1448, 1452,  
     1456, 1460, 1464, 1468, 1472, 1476,  
     1480, 1484, 1490, 1494, 1498, 1502,  
     1506, 1510, 1514, 1519, 1523, 1527,  
     1531, 1535, 1539, 1543, 1548, 1553,  
     1557, 1561, 1565, 1569, 1573, 1577,

1582, 1586, 1590, 1594, 1598, 1602,  
1606, 1610, 1614, 1618, 1624, 1628,  
1632, 1636, 1640, 1644, 1648, 1653,  
1657, 1661, 1665, 1669, 1673, 1677,  
1683, 1840, 1844, 1848, 1852, 1856,  
1860, 1864, 1868, 1872, 1876, 1880,  
1884, 1888, 1892, 1897, 1902, 1907,  
1911, 1915, 1920, 1925, 1930, 1939,  
1947, 1953, 1960, 1965, 1972, 1981,  
1986, 1991, 1996, 2003, 2007, 2012,  
2020, 2024, 2028, 2032, 2036,  
2041, 2045, 2049, 2053, 2057,  
2062, 2068, 2072, 2076, 2081,  
2085, 2089, 2093, 2097, 2101, 2105,  
2109, 2113, 2117, 2121, 2125, 2130,  
2134, 2139, 2144, 2148, 2152, 2156,  
2160, 2164, 2168, 2172, 2176, 2182,  
2188, 2192, 2196, 2200, 2204, 2208,  
2212, 2216, 2220, 2224, 2228, 2232,  
2236, 2240, 2244, 2248, 2252,  
2256, 2260, 2264, 2268, 2274, 2281,  
2286, 2290, 2296, 2302, 2306,  
2312, 2323, 2327, 2333, 2339,  
2343, 2347, 2351, 2355, 2359,  
2363, 2367, 2371, 2377, 2383, 2387,  
2391, 2395, 2399, 2403, 2407,  
2411, 2415, 2421, 2425, 2431, 2436,  
2440, 2444, 2448, 2452, 2456, 2460,  
2464, 2468, 2472, 2476, 2480, 2484,  
2488, 2492, 2496, 2500, 2504,  
2508, 2512, 2516, 2520, 2524, 2528,  
2532, 2536, 2540, 2544, 2550,  
2557, 2561, 2565, 2569, 2573, 2577,  
2581, 2585, 2589, 2593, 2597, 2601,  
2605, 2609, 2613, 2617, 2621, 2625,  
2629, 2633, 2637, 2641, 2645,  
2649, 2653, 2657, 2661, 2665,  
2669, 2673, 2677, 2683, 2690,  
2694, 2698, 2702, 2706, 2710, 2714,  
2718, 2722, 2726, 2731, 2735, 2739,  
2743, 2747, 2751, 2755, 2759, 2763,  
2767, 2773, 2777, 2781, 2785, 2789,  
2793, 2797, 2802, 2806, 2810,  
2814, 2818, 2822, 2826, 2831, 2836,  
2840, 2844, 2848, 2852, 2856,  
2860, 2865, 2869, 2873, 2877,  
2881, 2885, 2889, 2893, 2897,  
2901, 2907, 2911, 2915, 2919, 2923,  
2927, 2931, 2936, 2940, 2944,  
2948, 2952, 2956, 2960, 2966,  
3117, 3121, 3125, 3129, 3133, 3137,  
3141, 3145, 3149, 3153, 3157, 3161,  
3165, 3169, 3174, 3179, 3184, 3188,  
3192, 3197, 3202, 3207, 3216, 3224,  
3230, 3237, 3242, 3249, 3258,  
3263, 3268, 3273, 3280, 3284,  
3289, 3297, 3301, 3305, 3309,  
3313, 3318, 3322, 3326, 3330,  
3334, 3339, 3345, 3349, 3353,  
3358, 3362, 3366, 3370, 3374,  
3378, 3382, 3386, 3390, 3394,  
3398, 3402, 3407, 3411, 3416, 3421,  
3425, 3429, 3433, 3437, 3441, 3445,  
3449, 3453, 3459, 3465, 3469,  
3473, 3477, 3481, 3485, 3489, 3493,  
3497, 3501, 3505, 3509, 3513, 3517,  
3521, 3525, 3529, 3533, 3537,  
3541, 3545, 3551, 3558, 3563, 3567,  
3573, 3579, 3583, 3589, 3600,  
3604, 3610, 3616, 3620, 3624,  
3628, 3632, 3636, 3640, 3644,  
3648, 3654, 3660, 3664, 3668,  
3672, 3676, 3680, 3684, 3688,  
3692, 3698, 3702, 3708, 3713, 3717,  
3721, 3725, 3729, 3733, 3737, 3741,  
3745, 3749, 3753, 3757, 3761, 3765,  
3769, 3773, 3777, 3781, 3785, 3789,  
3793, 3797, 3801, 3805, 3809,  
3813, 3817, 3821, 3827, 3834, 3838,  
3842, 3846, 3850, 3854, 3858,  
3862, 3866, 3870, 3874, 3878,  
3882, 3886, 3890, 3894, 3898,  
3902, 3906, 3910, 3914, 3918, 3922,  
3926, 3930, 3934, 3938, 3942,  
3946, 3950, 3954, 3960, 3967,  
3971, 3975, 3979, 3983, 3987,  
3991, 3995, 3999, 4003, 4008,  
4012, 4016, 4020, 4024, 4028, 4032,  
4036, 4040, 4044, 4050, 4054,  
4058, 4062, 4066, 4070, 4074, 4079,  
4083, 4087, 4091, 4095, 4099, 4103,  
4108, 4113, 4117, 4121, 4125, 4129,  
4133, 4137, 4142, 4146, 4150, 4154,  
4158, 4162, 4166, 4170, 4174, 4178,  
4184, 4188, 4192, 4196, 4200, 4204,  
4208, 4213, 4217, 4221, 4225, 4229,  
4233, 4237, 4243, 4394, 4398, 4402,  
4406, 4410, 4414, 4418, 4422, 4426,  
4430, 4434, 4438, 4442, 4446, 4451,  
4456, 4461, 4465, 4469, 4474, 4479,  
4484, 4493, 4501, 4507, 4514, 4519,  
4526, 4535, 4540, 4545, 4550, 4557,  
4561, 4566, 4574, 4578, 4582, 4586,  
4590, 4595, 4599, 4603, 4607,  
4611, 4616, 4622, 4626, 4630, 4635,  
4639, 4643, 4647, 4651, 4655, 4659,  
4663, 4667, 4671, 4675, 4679, 4684,  
4688, 4693, 4698, 4702, 4706, 4710,

4714, 4718, 4722, 4726, 4730, 4736,  
4742, 4746, 4750, 4754, 4758, 4762,  
4766, 4770, 4774, 4778, 4782, 4786,  
4790, 4794, 4798, 4802, 4806, 4810,  
4814, 4818, 4822, 4828, 4835, 4840,  
4844, 4850, 4856, 4860, 4866,  
4877, 4881, 4887, 4893, 4897, 4901,  
4905, 4909, 4913, 4917, 4921, 4925,  
4931, 4937, 4941, 4945, 4949, 4953,  
4957, 4961, 4965, 4969, 4975, 4979,  
4985, 4990, 4994, 4998, 5002,  
5006, 5010, 5014, 5018, 5022, 5026,  
5030, 5034, 5038, 5042, 5046,  
5050, 5054, 5058, 5062, 5066,  
5070, 5074, 5078, 5082, 5086,  
5090, 5094, 5098, 5104, 5111, 5115,  
5119, 5123, 5127, 5131, 5135, 5139,  
5143, 5147, 5151, 5155, 5159, 5163,  
5167, 5171, 5175, 5179, 5183, 5187,  
5191, 5195, 5199, 5203, 5207, 5211,  
5215, 5219, 5223, 5227, 5231, 5237,  
5244, 5248, 5252, 5256, 5260,  
5264, 5268, 5272, 5276, 5280,  
5285, 5289, 5293, 5297, 5301,  
5305, 5309, 5313, 5317, 5321, 5327,  
5331, 5335, 5339, 5343, 5347, 5351,  
5356, 5360, 5364, 5368, 5372,  
5376, 5380, 5385, 5390, 5394,  
5398, 5402, 5406, 5410, 5414, 5419,  
5423, 5427, 5431, 5435, 5439, 5443,  
5447, 5451, 5455, 5461, 5465, 5469,  
5473, 5477, 5481, 5485, 5490, 5494,  
5498, 5502, 5506, 5510, 5514, 5520,  
5671, 5675, 5679, 5683, 5687, 5691,  
5695, 5699, 5703, 5707, 5711, 5715,  
5719, 5723, 5728, 5733, 5738, 5742,  
5746, 5751, 5756, 5761, 5770, 5778,  
5784, 5791, 5796, 5803, 5812, 5817,  
5822, 5827, 5834, 5838, 5843,  
5851, 5855, 5859, 5863, 5867,  
5872, 5876, 5880, 5884, 5888,  
5893, 5899, 5903, 5907, 5912,  
5916, 5920, 5924, 5928, 5932,  
5936, 5940, 5944, 5948, 5952,  
5956, 5961, 5965, 5970, 5975,  
5979, 5983, 5987, 5991, 5995,  
5999, 6003, 6007, 6013, 6019,  
6023, 6027, 6031, 6035, 6039,  
6043, 6047, 6051, 6055, 6059,  
6063, 6067, 6071, 6075, 6079,  
6083, 6087, 6091, 6095, 6099,  
6105, 6112, 6117, 6121, 6127, 6133,  
6137, 6143, 6154, 6158, 6164, 6170,  
6174, 6178, 6182, 6186, 6190, 6194,  
6198, 6202, 6208, 6214, 6218, 6222,  
6226, 6230, 6234, 6238, 6242,  
6246, 6252, 6256, 6262, 6267,  
6271, 6275, 6279, 6283, 6287,  
6291, 6295, 6299, 6303, 6307,  
6311, 6315, 6319, 6323, 6327, 6331,  
6335, 6339, 6343, 6347, 6351,  
6355, 6359, 6363, 6367, 6371,  
6375, 6381, 6388, 6392, 6396,  
6400, 6404, 6408, 6412, 6416, 6420,  
6424, 6428, 6432, 6436, 6440,  
6444, 6448, 6452, 6456, 6460,  
6464, 6468, 6472, 6476, 6480,  
6484, 6488, 6492, 6496, 6500,  
6504, 6508, 6514, 6521, 6525,  
6529, 6533, 6537, 6541, 6545,  
6549, 6553, 6557, 6562, 6566,  
6570, 6574, 6578, 6582, 6586,  
6590, 6594, 6598, 6604, 6608,  
6612, 6616, 6620, 6624, 6628,  
6633, 6637, 6641, 6645, 6649,  
6653, 6657, 6662, 6667, 6671,  
6675, 6679, 6683, 6687, 6691,  
6696, 6700, 6704, 6708, 6712, 6716,  
6720, 6724, 6728, 6732, 6738, 6742,  
6746, 6750, 6754, 6758, 6762, 6767,  
6771, 6775, 6779, 6783, 6787, 6791,  
6797, 6948, 6952, 6956, 6960,  
6964, 6968, 6972, 6976, 6980,  
6984, 6988, 6992, 6996, 7000,  
7005, 7010, 7015, 7019, 7023, 7028,  
7033, 7038, 7047, 7055, 7061, 7068,  
7073, 7080, 7089, 7094, 7099,  
7104, 7111, 7115, 7120, 7128, 7132,  
7136, 7140, 7144, 7149, 7153, 7157,  
7161, 7165, 7170, 7176, 7180, 7184,  
7189, 7193, 7197, 7201, 7205, 7209,  
7213, 7217, 7221, 7225, 7229, 7233,  
7238, 7242, 7247, 7252, 7256, 7260,  
7264, 7268, 7272, 7276, 7280, 7284,  
7290, 7296, 7300, 7304, 7308,  
7312, 7316, 7320, 7324, 7328, 7332,  
7336, 7340, 7344, 7348, 7352, 7356,  
7360, 7364, 7368, 7372, 7376, 7382,  
7389, 7394, 7398, 7404, 7410, 7414,  
7420, 7431, 7435, 7441, 7447, 7451,  
7455, 7459, 7463, 7467, 7471, 7475,  
7479, 7485, 7491, 7495, 7499, 7503,  
7507, 7511, 7515, 7519, 7523, 7529,  
7533, 7539, 7544, 7548, 7552, 7556,  
7560, 7564, 7568, 7572, 7576, 7580,  
7584, 7588, 7592, 7596, 7600,  
7604, 7608, 7612, 7616, 7620, 7624,  
7628, 7632, 7636, 7640, 7644, 7648,

7652, 7658, 7665, 7669, 7673, 7677,  
7681, 7685, 7689, 7693, 7697, 7701,  
7705, 7709, 7713, 7717, 7721, 7725,  
7729, 7733, 7737, 7741, 7745, 7749,  
7753, 7757, 7761, 7765, 7769, 7773,  
7777, 7781, 7785, 7791, 7798, 7802,  
7806, 7810, 7814, 7818, 7822, 7826,  
7830, 7834, 7839, 7843, 7847, 7851,  
7855, 7859, 7863, 7867, 7871, 7875,  
7881, 7885, 7889, 7893, 7897, 7901,  
7905, 7910, 7914, 7918, 7922, 7926,  
7930, 7934, 7939, 7944, 7948, 7952,  
7956, 7960, 7964, 7968, 7973, 7977,  
7981, 7985, 7989, 7993, 7997, 8001,  
8005, 8009, 8015, 8019, 8023,  
8027, 8031, 8035, 8039, 8044,  
8048, 8052, 8056, 8060, 8064,  
8068, 8074, 8230, 8234, 8238,  
8242, 8246, 8250, 8254, 8258,  
8262, 8266, 8270, 8274, 8278,  
8282, 8287, 8292, 8297, 8301,  
8305, 8310, 8315, 8320, 8329,  
8337, 8343, 8350, 8355, 8362,  
8371, 8376, 8381, 8386, 8393,  
8397, 8402, 8410, 8414, 8418, 8422,  
8426, 8431, 8435, 8439, 8443, 8447,  
8452, 8458, 8462, 8466, 8471, 8475,  
8479, 8483, 8487, 8491, 8495, 8499,  
8503, 8507, 8511, 8515, 8520, 8524,  
8529, 8534, 8538, 8542, 8546,  
8550, 8554, 8558, 8562, 8566,  
8572, 8578, 8582, 8586, 8590,  
8594, 8598, 8602, 8606, 8610,  
8614, 8618, 8622, 8626, 8630,  
8634, 8638, 8642, 8646, 8650,  
8654, 8658, 8664, 8671, 8676,  
8680, 8686, 8692, 8696, 8702,  
8713, 8717, 8723, 8729, 8733, 8737,  
8741, 8745, 8749, 8753, 8757, 8761,  
8767, 8773, 8777, 8781, 8785, 8789,  
8793, 8797, 8801, 8805, 8811, 8815,  
8821, 8826, 8830, 8834, 8838,  
8842, 8846, 8850, 8854, 8858,  
8862, 8866, 8870, 8874, 8878,  
8882, 8886, 8890, 8894, 8898,  
8902, 8906, 8910, 8914, 8918,  
8922, 8926, 8930, 8934, 8940,  
8947, 8951, 8955, 8959, 8963,  
8967, 8971, 8975, 8979, 8983,  
8987, 8991, 8995, 8999, 9003,  
9007, 9011, 9018, 9022, 9026,  
9030, 9034, 9038, 9042, 9046,  
9050, 9054, 9058, 9062, 9066,  
9070, 9076, 9083, 9087, 9091,  
9095, 9099, 9103, 9107, 9111, 9115,  
9119, 9124, 9128, 9132, 9136, 9140,  
9144, 9148, 9152, 9156, 9160, 9166,  
9170, 9174, 9178, 9182, 9186, 9190,  
9195, 9199, 9203, 9207, 9211, 9215,  
9219, 9224, 9229, 9233, 9237,  
9241, 9245, 9249, 9253, 9258,  
9262, 9266, 9270, 9274, 9278,  
9282, 9286, 9290, 9294, 9300,  
9304, 9308, 9312, 9316, 9320,  
9324, 9329, 9333, 9337, 9341,  
9345, 9349, 9353, 9359, 9424,  
9429, 9434, 9439, 9444, 9449,  
9454, 9459, 9464, 9469, 9474, 9479,  
9484, 9490, 9496, 9502, 9506,  
9511, 9518, 9523, 9529, 9534, 9539,  
9544, 9550, 9557, 9563, 9568,  
9573, 9578, 9583, 9588, 9593,  
9598, 9602, 9606, 9610, 9614,  
9618, 9622, 9626, 9630, 9634,  
9639, 9645, 9650, 9656, 9663,  
9667, 9674, 9680, 9686, 9692,  
9698, 9704, 9710, 9716, 9722, 9728,  
9734, 9740, 9747, 9753, 9758, 9763,  
9767, 9771, 9775, 9779, 9783, 9787,  
9791, 9795, 9799, 9803, 9807,  
9812, 9817, 9822, 9827, 9832,  
9837, 9842, 9847, 9853, 9859,  
9864, 9869, 9874, 9879, 9884,  
9889, 9894, 9899, 9905, 9910,  
9915, 9919, 9923, 9927, 9931,  
9936, 9940, 9945, 9950, 9954,  
9959, 9963, 9968, 9973, 9978,  
9982, 9986, 9990, 9994, 9999,  
10004, 10008, 10012, 10017, 10021,  
10025, 10031, 10035, 10039, 10043,  
10049, 10057, 10110, 10115, 10120,  
10125, 10130, 10135, 10140, 10145,  
10150, 10155, 10160, 10165, 10170,  
10176, 10182, 10188, 10192, 10197,  
10204, 10209, 10215, 10220, 10225,  
10230, 10236, 10243, 10249, 10254,  
10259, 10264, 10269, 10274, 10279,  
10284, 10288, 10292, 10296, 10300,  
10304, 10308, 10312, 10316, 10320,  
10325, 10331, 10336, 10342, 10349,  
10353, 10360, 10366, 10372, 10378,  
10384, 10390, 10396, 10402, 10408,  
10414, 10420, 10426, 10433, 10439,  
10444, 10449, 10453, 10457, 10461,  
10465, 10469, 10473, 10477, 10481,  
10485, 10489, 10493, 10498, 10503,  
10508, 10513, 10518, 10523, 10528,  
10533, 10539, 10545, 10550, 10555,

	T
\t . . . . .	9530, 10216, 10898
t1-cfr.etx (etx) . . . . .	407
t1-dotaltf_f (etx) . . . . .	1688
t1-dotinf.etx (etx) . . . . .	2971
t1-dotinferior.etx (etx) . . . . .	4248
t1-dotsup.etx (etx) . . . . .	5525
t1-dotsuperior.etx (etx) . . . . .	6802
t1-f_f.etx (etx) . . . . .	8079
t1j-f_f.etx (etx) . . . . .	9364
tag.lua (lua) . . . . .	14
targets:	
fnttarg . . . . .	3, 14, 14
uniquifyencs . . . . .	3, 14, 14
templates:	
fnt-tables.tex . . . . .	1
\TeX . . . . .	616, 621, 639, 644, 682, 731, 1204, 1339, 1487, 1545, 1621, 1680, 1899, 1904, 1922, 1927, 1967, 2016, 2489, 2622, 2770, 2828, 2904, 2963, 3176, 3181, 3199, 3204, 3244, 3293, 3766, 3899, 4047, 4105, 4181, 4240, 4453, 4458, 4476, 4481, 4521, 4570, 5043, 5176, 5324, 5382, 5458, 5517, 5730, 5735, 5753, 5758, 5798, 5847, 6320, 6453, 6601, 6659, 6735, 6794, 7007, 7012, 7030, 7035, 7075, 7124, 7597, 7730, 7878, 7936, 8012, 8071, 8289, 8294, 8312, 8317, 8357, 8406, 8879, 9013, 9163, 9221, 9297, 9356
\textacutedbl . . . . .	9764, 10450, 11132
\textasciacute . . . . .	9995, 10681, 11363
\textasciibreve . . . . .	9754, 10440, 11122
\textasciicaron . . . . .	9759, 10445, 11127
\textasciicircum . . . . .	984, 2269, 3546, 4823, 6100, 7377, 8659
\textasciidieresis . . . . .	9941, 10627, 11309
\textasciigrave . . . . .	9699, 10385, 11067
\textasciimacron . . . . .	9974, 10660, 11342
\textasciitilde . . . . .	1141, 2426, 3703, 4980, 6257, 7534, 8816, 9742, 10428, 11110
\textasteriskcentered . . . . .	9574, 10260, 10942
\textbackslash . . . . .	976, 2261, 3538, 4815, 6092, 7369, 8651
\textbaht . . . . .	9875, 10561, 11243
\textbar . . . . .	1131, 2416, 3693, 4970, 6247, 7524, 8806, 9933, 10619, 11301
\textbardbl . . . . .	9780, 10466, 11148
\textbf . . . . .	49
\textbigcircle . . . . .	9661, 10347, 11029
\textblank . . . . .	9558, 10244, 10926
\textborn . . . . .	9705, 10391, 11073

---

```

\textbraceleft ..... 1127, 2412, 3689, 4966, 6243, 7520, 8802
\textbraceright ..... 1137, 2422, 3699, 4976, 6253, 7530, 8812
\textbrokenbar ..... 9932, 10618, 11300
\textbullet ..... 9788, 10474, 11156
\textcelsius ..... 9792, 10478, 11160
\textcent ..... 9916, 10602, 11284
\textcentoldstyle ..... 9800, 10486, 11168
\textcircledP ..... 9964, 10650, 11332
\textcolonmonetary ... 9808, 10494, 11176
\textcopyleft ..... 9955, 10641, 11323
\textcopyright ..... 9662, 9946, 10348, 10632, 11030, 11314
\textcurrency ..... 9924, 10610, 11292
\textdagger ..... 9772, 10458, 11140
\textdaggerdbl ..... 9776, 10462, 11144
\textdblhyphen ..... 9584, 10270, 10952
\textdegree ..... 9979, 10665, 11347
\textdied ..... 9717, 10403, 11085
\textdiscount ..... 9885, 10571, 11253
\textdiv ..... 10058, 10744, 11445
\textdivorced ..... 9711, 10397, 11079
\textdollar ..... 9564, 10250, 10932
\textdollaroldstyle .. 9796, 10482, 11164
\textdong ..... 9854, 10540, 11222
\textdownarrow ..... 9693, 10379, 11061
\textemdash ..... 658, 1943, 3220, 4497, 5774, 7051, 8333
\textendash ..... 651, 1935, 3212, 4489, 5766, 7043, 8325
\textestimated ..... 9890, 10576, 11258
\texteuro ..... 10044, 10730, 11413, 11417
\textflorin ..... 9804, 10490, 11172
\textfractionsolidus 9594, 10280, 10962
\textgravedbl ..... 9768, 10454, 11136
\textgreater ..... 851, 2136, 3413, 4690, 5967, 7244, 8526
\textguarani ..... 9823, 10509, 11191
\textinterrobang ..... 9843, 10529, 11211
\textinterrobangdown . 9848, 10534, 11216
\textlangle ..... 9640, 10326, 11008
\textlbrackdbl ..... 9675, 10361, 11043
\textleaf ..... 9723, 10409, 11091
\textleftarrow ..... 9519, 10205, 10887
\textless ..... 842, 2127, 3404, 4681, 5958, 7235, 8517
\textlira ..... 9833, 10519, 11201
\textlnot ..... 9960, 10646, 11328
\textlquill ..... 9906, 10592, 11274
\textmarried ..... 9729, 10415, 11097
\textmho ..... 9657, 10343, 11025
\textminus ..... 9646, 10332, 11014
\textmu ..... 10000, 10686, 11368
\textmusicalnote ..... 9735, 10421, 11103
\textnaira ..... 9818, 10504, 11186
\textnumero ..... 9880, 10566, 11248
\textohm ..... 9668, 10354, 11036
\textonehalf ..... 10036, 10722, 11404
\textonequarter ..... 10032, 10718, 11400
\textonesuperior ..... 10018, 10704, 11386
\textopenbullet ..... 9895, 10581, 11263
\textordfeminine ..... 9951, 10637, 11319
\textordmasculine ..... 10022, 10708, 11390
\textparagraph ..... 9871, 10005, 10557, 10691, 11239, 11373
\textperiodcentered . 10009, 10695, 11377
\textpertenthousand .. 9865, 10551, 11233
\textperthousand ..... 9784, 10470, 11152
\textpeso ..... 9828, 10514, 11196
\textpilcrow ..... 9870, 10556, 11238
\textpm ..... 9983, 10669, 11351
\textquotedbl ..... 728, 2013, 3290, 4567, 5844, 7121, 8403
\textquotedblleft ..... 625, 1908, 3185, 4462, 5739, 7016, 8298
\textquotedblright ..... 629, 1912, 3189, 4466, 5743, 7020, 8302
\textquotaleft ..... 998, 2283, 3560, 4837, 6114, 7391, 8673
\textquoteright ..... 753, 2038, 3315, 4592, 5869, 7146, 8428
\textquotesingle ... 9569, 10255, 10937
\textquotestraightbase 9492, 10178, 10860
\textquotestraightdblbase ..... 9498, 10184, 10866
\textrangle ..... 9651, 10337, 11019
\textrbrackdbl ..... 9681, 10367, 11049
\textrecipe ..... 9838, 10524, 11206
\textreferencemark .. 10013, 10699, 11381
\textregistered ..... 9662, 9969, 10348, 10655, 11030, 11337
\textrightarrow ..... 9524, 10210, 10892
\textrquill ..... 9911, 10597, 11279
\textsection . 1283, 2566, 3843, 5120, 6397, 7674, 8956, 9937, 10623, 11305
\textservicemark ... 9900, 10586, 11268
\textsterling ..... 1416, 2699, 3976, 5253, 6530, 7807, 9092, 9834, 9920, 10520, 10606, 11202, 11288
\textsurd ..... 10026, 10712, 11394
\textthreequarters .. 10040, 10726, 11408
\textthreequartersemdash ..... 9507, 10193, 10875
\textthreesuperior .. 9991, 10677, 11359
\texttildelow ..... 9741, 10427, 11109
\texttimes ..... 10050, 10736, 11437
\texttrademark ..... 9860, 10546, 11228

```

\textttt .....	652, 659, 1936, 1944, 3213, 3221, 4490, 4498, 5767, 5775, 7044, 7052, 8326, 8334	\topaccent .....	35, 63
\textttwelveudash .....	9503, 10189, 10871	ts1-dotinf. etx (etx) .....	9380
\texttwosuperior .....	9987, 10673, 11355	ts1-dotsup. etx (etx) .....	10066
\textunderscore .....	990, 2275, 3552, 4829, 6106, 7383, 8665	ts1-euro. etx (etx) .....	10752
\textuparrowarrow .....	9687, 10373, 11055	\tt .....	731, 2016, 3293, 4570, 5847, 7124, 8406
\textvisiblespace .....	719, 2004, 3281, 4558, 5835, 7112, 8394	\TypesetStringExpression .....	62, 67
\textwon .....	9813, 10499, 11181		
\textyen .....	9928, 10614, 11296		
\then .....	33, 41, 79, 120, 123, 169, 174, 195, 223, 254, 261, 271, 284, 314, 347, 357, 363, 390, 430, 431, 441, 447, 448, 459, 465, 467, 473, 483, 489, 491, 497, 503, 505, 511, 517, 519, 525, 550, 685, 688, 895, 1009, 1025, 1028, 1046, 1090, 1265, 1398, 1713, 1714, 1724, 1730, 1731, 1742, 1748, 1750, 1756, 1766, 1772, 1774, 1780, 1786, 1788, 1794, 1800, 1802, 1808, 1833, 1970, 1973, 2180, 2294, 2310, 2313, 2331, 2375, 2548, 2681, 2990, 2991, 3001, 3007, 3008, 3019, 3025, 3027, 3033, 3043, 3049, 3051, 3057, 3063, 3065, 3071, 3077, 3079, 3085, 3110, 3247, 3250, 3457, 3571, 3587, 3590, 3608, 3652, 3825, 3958, 4267, 4268, 4278, 4284, 4285, 4296, 4302, 4304, 4310, 4320, 4326, 4328, 4334, 4340, 4342, 4348, 4354, 4356, 4362, 4387, 4524, 4527, 4734, 4848, 4864, 4867, 4885, 4929, 5102, 5235, 5544, 5545, 5555, 5561, 5562, 5573, 5579, 5581, 5587, 5597, 5603, 5605, 5611, 5617, 5619, 5625, 5631, 5633, 5639, 5664, 5801, 5804, 6011, 6125, 6141, 6144, 6162, 6206, 6379, 6512, 6821, 6822, 6832, 6838, 6839, 6850, 6856, 6858, 6864, 6874, 6880, 6882, 6888, 6894, 6896, 6902, 6908, 6910, 6916, 6941, 7078, 7081, 7288, 7402, 7418, 7421, 7439, 7483, 7656, 7789, 8103, 8104, 8114, 8120, 8121, 8132, 8138, 8140, 8146, 8156, 8162, 8164, 8170, 8176, 8178, 8184, 8190, 8192, 8198, 8223, 8360, 8363, 8570, 8684, 8700, 8703, 8721, 8765, 8938, 9074, 9398, 9404, 9406, 10084, 10090, 10092, 10764, 10770, 10772, 11411, 11459, 11460	\u .....	590, 1152, 1180, 1287, 1315, 1873, 2437, 2465, 2570, 2598, 3150, 3714, 3742, 3847, 3875, 4427, 4991, 5019, 5124, 5152, 5704, 6268, 6296, 6401, 6429, 6981, 7545, 7573, 7678, 7706, 8263, 8827, 8855, 8960, 8988
\uc .....	383, 426, 863, 867, 871, 875, 879, 883, 887, 891, 897, 903, 907, 911, 915, 919, 923, 927, 931, 935, 939, 943, 947, 951, 955, 959, 963, 967, 1155, 1175, 1187, 1191, 1203, 1229, 1237, 1443, 1448, 1484, 1514, 1519, 1543, 1709, 2148, 2152, 2156, 2160, 2164, 2168, 2172, 2176, 2182, 2188, 2192, 2196, 2200, 2204, 2208, 2212, 2216, 2220, 2224, 2228, 2232, 2236, 2240, 2244, 2248, 2252, 2440, 2460, 2472, 2476, 2488, 2512, 2520, 2726, 2731, 2767, 2797, 2802, 2826, 2986, 3425, 3429, 3433, 3437, 3441, 3445, 3449, 3453, 3459, 3465, 3469, 3473, 3477, 3481, 3485, 3489, 3493, 3497, 3501, 3505, 3509, 3513, 3517, 3521, 3525, 3529, 3717, 3737, 3749, 3753, 3765, 3789, 3797, 4003, 4008, 4044, 4074, 4079, 4103, 4263, 4702, 4706, 4710, 4714, 4718, 4722, 4726, 4730, 4736, 4742, 4746, 4750, 4754, 4758, 4762, 4766, 4770, 4774, 4778, 4782, 4786, 4790, 4794, 4798, 4802, 4806, 4994, 5014, 5026, 5030, 5042, 5066, 5074, 5280, 5285, 5321, 5351, 5356, 5380, 5540, 5979, 5983, 5987, 5991, 5995, 5999, 6003, 6007, 6013, 6019, 6023, 6027, 6031, 6035, 6039, 6043, 6047, 6051, 6055, 6059, 6063, 6067, 6071, 6075, 6079, 6083, 6271, 6291, 6303, 6307, 6319, 6343, 6351, 6557, 6562, 6598, 6628, 6633, 6657, 6817, 7256, 7260, 7264, 7268, 7272, 7276, 7280, 7284, 7290, 7296, 7300, 7304, 7308, 7312, 7316, 7320, 7324, 7328, 7332, 7336, 7340, 7344, 7348,	\U .....	

- 7352, 7356, 7360, 7548, 7568,  
 7580, 7584, 7596, 7620, 7628,  
 7834, 7839, 7875, 7905, 7910, 7934,  
 8099, 8538, 8542, 8546, 8550,  
 8554, 8558, 8562, 8566, 8572,  
 8578, 8582, 8586, 8590, 8594,  
 8598, 8602, 8606, 8610, 8614,  
 8618, 8622, 8626, 8630, 8634,  
 8638, 8642, 8830, 8850, 8862,  
 8866, 8878, 8902, 8910, 9119, 9124,  
 9160, 9190, 9195, 9219, 9370, 11457  
**ucdotalt.etx** (etx) . . . . . 11454  
**\uclig** . 387, 432, 433, 438, 1267, 1548,  
 1715, 1716, 1721, 2550, 2831, 2992,  
 2993, 2998, 3827, 4108, 4269,  
 4270, 4275, 5104, 5385, 5546, 5547,  
 5552, 6381, 6662, 6823, 6824,  
 6829, 7658, 7939, 8105, 8106, 8111,  
 8940, 9224, 9374, 11461, 11462, 11467  
**\uctop** . . . . . 385,  
 428, 1151, 1159, 1163, 1167, 1171,  
 1179, 1183, 1195, 1199, 1209, 1213,  
 1217, 1221, 1225, 1233, 1241, 1245,  
 1249, 1253, 1257, 1261, 1274, 1419,  
 1423, 1427, 1431, 1435, 1439, 1452,  
 1456, 1460, 1464, 1468, 1472, 1476,  
 1480, 1490, 1494, 1498, 1502, 1506,  
 1510, 1523, 1527, 1531, 1535, 1539,  
 1711, 2436, 2444, 2448, 2452, 2456,  
 2464, 2468, 2480, 2484, 2492,  
 2496, 2500, 2504, 2508, 2516,  
 2524, 2528, 2532, 2536, 2540,  
 2544, 2557, 2702, 2706, 2710, 2714,  
 2718, 2722, 2735, 2739, 2743, 2747,  
 2751, 2755, 2759, 2763, 2773, 2777,  
 2781, 2785, 2789, 2793, 2806, 2810,  
 2814, 2818, 2822, 2988, 3713, 3721,  
 3725, 3729, 3733, 3741, 3745, 3757,  
 3761, 3769, 3773, 3777, 3781, 3785,  
 3793, 3801, 3805, 3809, 3813, 3817,  
 3821, 3834, 3979, 3983, 3987,  
 3991, 3995, 3999, 4012, 4016, 4020,  
 4024, 4028, 4032, 4036, 4040,  
 4050, 4054, 4058, 4062, 4066,  
 4070, 4083, 4087, 4091, 4095,  
 4099, 4265, 4990, 4998, 5002,  
 5006, 5010, 5018, 5022, 5034,  
 5038, 5046, 5050, 5054, 5058,  
 5062, 5070, 5078, 5082, 5086,  
 5090, 5094, 5098, 5111, 5256, 5260,  
 5264, 5268, 5272, 5276, 5289,  
 5293, 5297, 5301, 5305, 5309,  
 5313, 5317, 5327, 5331, 5335, 5339,  
 5343, 5347, 5360, 5364, 5368,  
 5372, 5376, 5542, 6267, 6275,  
 6279, 6283, 6287, 6295, 6299,  
 6311, 6315, 6323, 6327, 6331, 6335,  
 6339, 6347, 6355, 6359, 6363,  
 6367, 6371, 6375, 6388, 6533,  
 6537, 6541, 6545, 6549, 6553,  
 6566, 6570, 6574, 6578, 6582,  
 6586, 6590, 6594, 6604, 6608,  
 6612, 6616, 6620, 6624, 6637, 6641,  
 6645, 6649, 6653, 6819, 7544,  
 7552, 7556, 7560, 7564, 7572, 7576,  
 7588, 7592, 7600, 7604, 7608,  
 7612, 7616, 7624, 7632, 7636, 7640,  
 7644, 7648, 7652, 7665, 7810, 7814,  
 7818, 7822, 7826, 7830, 7843, 7847,  
 7851, 7855, 7859, 7863, 7867, 7871,  
 7881, 7885, 7889, 7893, 7897, 7901,  
 7914, 7918, 7922, 7926, 7930, 8101,  
 8826, 8834, 8838, 8842, 8846,  
 8854, 8858, 8870, 8874, 8882,  
 8886, 8890, 8894, 8898, 8906,  
 8914, 8918, 8922, 8926, 8930,  
 8934, 8947, 9095, 9099, 9103,  
 9107, 9111, 9115, 9128, 9132, 9136,  
 9140, 9144, 9148, 9152, 9156, 9166,  
 9170, 9174, 9178, 9182, 9186, 9199,  
 9203, 9207, 9211, 9215, 9372, 11458  
**\unfakable** . . . . . 208, 209, 210, 211,  
 212, 213, 214, 215, 216, 217, 218, 219  
**uniquify()** (fn) . . . . . 4, 14  
**uniquifyencs** (targ) . . . . . 3, 14, 14  
**\usemtxpackage** . . . . . 23, 191, 193, 197, 198, 199, 203, 206  
**\usepackage** . . . . . 6, 7

**V**

- \v** . . . 586, 1164, 1168, 1172, 1188, 1200,  
 1218, 1226, 1234, 1258, 1299, 1303,  
 1307, 1323, 1335, 1351, 1359, 1367,  
 1391, 1869, 2449, 2453, 2457, 2473,  
 2485, 2501, 2509, 2517, 2541, 2582,  
 2586, 2590, 2606, 2618, 2634,  
 2642, 2650, 2674, 3146, 3726, 3730,  
 3734, 3750, 3762, 3778, 3786, 3794,  
 3818, 3859, 3863, 3867, 3883,  
 3895, 3911, 3919, 3927, 3951, 4423,  
 5003, 5007, 5011, 5027, 5039,  
 5055, 5063, 5071, 5095, 5136, 5140,  
 5144, 5160, 5172, 5188, 5196, 5204,  
 5228, 5700, 6280, 6284, 6288,  
 6304, 6316, 6332, 6340, 6348,  
 6372, 6413, 6417, 6421, 6437, 6449,  
 6465, 6473, 6481, 6505, 6977, 7557,  
 7561, 7565, 7581, 7593, 7609, 7617,

---

7625, 7649, 7690, 7694, 7698, 7714,	keeptempfiles . . . . .	6, <a href="#">14</a>
7726, 7742, 7750, 7758, 7782, 8259,	mapmakers . . . . .	6, <a href="#">14</a>
8839, 8843, 8847, 8863, 8875,	vendor . . . . .	6, <a href="#">14</a>
8891, 8899, 8907, 8931, 8972,	vendor (var) . . . . .	6, <a href="#">14</a>
8976, 8980, 8996, 9008, 9027,		
9035, 9043, 9067, 9460, 10146, 10828		
variables:		
autotestfds . . . . .	4, <a href="#">14</a>	
binmakers . . . . .	6, <a href="#">14</a>	
familymakers . . . . .	6, <a href="#">14</a>	
fnptestfds . . . . .	6, <a href="#">14</a>	
keepdir . . . . .	6, <a href="#">14</a>	
keepfiles . . . . .	6, <a href="#">14</a>	
keeptempdir . . . . .	6, <a href="#">14</a>	\xfonttable . . . . . 10

**W**

\width . . . . .	233, 235, 466, 468, 526, 1749,
	1751, 1809, 3026, 3028, 3086, 4303,
	4305, 4363, 5580, 5582, 5640,
	6857, 6859, 6917, 8139, 8141, 8199,
	9405, 9407, 10091, 10093, 10771, 10773

**X**

\xfonttable . . . . .	10
-----------------------	----