inputenc.sty

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1 Introduction

This package allows the user to specify an input encoding (for example, ASCII, ISO Latin-1 or Macintosh) by saying:

`\usepackage[`*encoding name*`]{inputenc}`

The encoding can also be selected in the document with:

`\inputencoding{`*encoding name*`}`

Originally this command was only to be used in vertical mode (with the idea that it should be only within a document when using text from several documents to build up a composite work such as a volume of journal articles). However, usages in certain languages suggested that it might be preferable to allow changing the input encoding at any time, which is what is possible now (though that is quite computing resource intensive).

The encodings provided by this package are:

- `ascii` ASCII encoding for the range 32–127 (all others are made invalid, i.e., this really defines a 7-bit encoding).
- `latin1` ISO Latin-1 encoding.
- `latin2` ISO Latin-2 encoding.
- `latin3` ISO Latin-3 encoding.
- `latin4` ISO Latin-4 encoding.
- `latin5` ISO Latin-5 encoding.
- `latin9` ISO Latin-9 encoding.
- `latin10` ISO Latin-10 encoding.
- `decmulti` DEC Multinational Character Set encoding.
- `cp850` IBM 850 code page.

- `cp852` IBM 852 code page.
- `cp858` IBM 858 code page (this is 850 with Euro symbol).
- `cp437` IBM 437 code page.
- `cp437de` IBM 437 code page (German version).
- `cp865` IBM 865 code page.
- `applemac` Macintosh encoding.
- `macce` Macintosh Central European code page.
- `next` Next encoding.
- `cp1250` Windows 1250 (central and eastern Europe) code page.
- `cp1252` Windows 1252 (Western Europe) code page.
- `cp1257` Windows 1257 (Baltic) code page.
- `ansinew` Windows 3.1 ANSI encoding, extension of Latin-1 (synonym[1] for `cp1252`).
- `utf8` Unicode UTF-8 encoding support.

1.1 8-bit input encoding support

The `inputenc` package makes the upper 8-bit characters active and assigns to all of them an error message. It then waits for the input encoding definitions to change this set-up. Similarly, whenever `\inputencoding` is encountered in a document, first the upper 8-bit characters are set back to produce an error and then the definitions for the new input encoding are loaded, changing some of the previous settings.

Each encoding has an associated `.def` file, for example `latin1.def` which defines the behaviour of each input character, using the commands:

```
\DeclareInputText{slot}{text}
\DeclareInputMath{slot}{math}
```

This defines the input character *slot* to be the *text* material or *math* material respectively. For example, `latin1.def` defines slots `"D6` (Æ) and `"B5` (μ) by saying:

```
\DeclareInputText{214}{\AE}
\DeclareInputMath{181}{\mu}
```

Note that the *commands* should be robust, and should not be dependent on the output encoding. The same *slot* should not have both a text and a math declaration for it. (This restriction may be removed in future releases of inputenc).

The `.def` file may also define commands using the declarations: `\providecommand` or `\ProvideTextCommandDefault`. For example:

```
\ProvideTextCommandDefault{\textonequarter}{\ensuremath{\frac14}}
\DeclareInputText{188}{\textonequarter}
```

[1] It is now generated using the guards `cp1252,ansinew` the latter only used for the provides file line.

The use of the 'provide' forms here will ensure that a better definition will not be over-written; their use is recommended since, in general, the best definition depends on the fonts available.

See the documentation in `fntguide.tex` and `ltoutenc.dtx` for details of how to declare text commands.

1.2 UTF-8 encoding support

The Unicode UTF-8 support works differently. It too uses a `.def` file (i.e., `utf8.def`) but this file does not contain code point declarations via the commands `\DeclareInputText` or `\DeclareInputMath`. Instead it defines a number of parsing commands that parse UTF-8 characters and then provides the corresponding LaTeX definitions (if possible).

Unfortunately the number of Unicode characters that in theory could be contained in a document is enormous. Thus even with today's amount of computer memory it would be unrealistic to predefine all of them. Therefore the approach taken by LaTeX is as follows:

- At the start of the document (`\begin{document}`) it examines all font encodings that are being used within the current document.
- For each such font encoding it loads all known UTF-8 mappings that generate characters from this font encoding.
- All other UTF-8 characters remain undefined and will produce an error message if they appear in the document.

The rationale behind this approach is that UTF-8 characters that do not correspond to any glyph within the used font encodings cannot be represented by LaTeX anyway (without loading a font containing the glyph, which in turn should "hopefully" set up the corresponding UTF-8 mapping).

This works well enough for the main Western languages for which LaTeX has proper font encoding support, but can fall short on other languages.

For some of these languages all that remains doing is to provide the necessary mappings and stick them into `utf8ienc.dtx`, so volunteers are welcome. For other languages that do not fit well into LaTeX font selection scheme, e.g., Asian languages the outlined inputenc approach will not work. If that is the case one can try using Dominique Unruh's option `utf8x` for inputenc which has a somewhat different approach and encodes many more UTF-8 characters than the standard `utf8` option. However, we recommend to do so only if you really need such alphabets and can not switch to one of the unicode engines xelatex or lualatex as there are problems with this extended approach which were precisely the reason that we decided to limit the support to what is properly supported within the boundaries of LaTeX's font selection.

If a UTF-8 mapping is missing and it is known to what LaTeX definition it should map to, one can manually define it using a `\DeclareUnicodeCharacter` declaration. This declaration is available after inputenc has been loaded with the `utf8` option.

The `\DeclareUnicodeCharacter` takes UTF-8 code point as its first argument (in form of a hexadecimal number) and the definition that this maps to as its

second argument. For example, the code point `00E4` which is "LATIN SMALL LETTER A WITH DIAERESIS" would be set up via:

```
\DeclareUnicodeCharacter{00E4}{\"a}
```

Conceptually the second argument should only contain "encoding-specific commands" as defined by LaTeX font encoding concept, i.e., commands that automatically change behavior if the font encoding changes (see chapter 7 of the LaTeX Companion for details).

For details of the mappings per font encoding and some more technical information see the file `utf8ienc.dtx` that provides UTF-8 support using the inputenc package interface.

1.3 Error messages

In certain situations the inputenc package generates one of the following three error messages.

1.3.1 `Keyboard character used is undefined in inputencoding '⟨name⟩'`

The document contains an 8-bit character that is not defined by the current input encoding in force. This means that either there is a mismatch between the document encoding that the document claims it is in (the option to inputenc) and the real encoding this document is encoded in. These days more often you find that UTF-8 is used as the encoding when saving a file in some text editor.

Of course, it is also possible that the input encoding `.def` file is defective and the offending code point is simply missing from that file. Please check if the encoding file is one of the list above prior to reporting an error—on the net there are many additional encoding files supported by third parties.

1.3.2 `Cannot define Unicode char value < 00A0`

This error message is shown if one tries to define a UTF-8 character with a code point lower than `00A0`. Those cannot be defined in LaTeX through the `\DeclareUnicodeCharacter`.

1.3.3 `Unicode char ⟨charcode⟩ not set up for use with LaTeX`

This is the dreaded error message that one will receive if the document contains an UTF-8 character that isn't known to LaTeX. It is quite possible that the character looks very unsuspicious and is rendered perfectly in the editor.

For example, when entering a Euro symbol from the keyboard one may receive this error rather than a typeset symbol. But if this happens the reason is simply that the document doesn't load a font containing the Euro symbol, e.g., via the `textcomp` package. Thus LaTeX does not know how to typeset one and therefore responds with this error message.

However, even if LaTeX can type that character in question it may not have been set up in which case you would need to do that yourself via `\DeclareUnicodeCharacter`. If you provide these declarations for a full font encoding then please contribute that work to this package so that others can benefit too.

1.4 Programmers interface

To better support packages that manage their own character mappings and therefore have to react to input encoding changes, the following three commands have been added in version 1.1a:

`\inputencodingname` This command stores the name of the current input encoding.

`\inpenc@prehook` `\inpenc@posthook` These two are token registers that are executed whenever an `\inputencoding` change happens. The first is executed at the very beginning, i.e., with `\inputencodingname` still pointing to the encoding name currently in place while the second one is executed at the very end, i.e., when `\inputencoding` has build a new mapping.

Packages making use of this new features should consider including the following line

```
\NeedsTeXFormat{LaTeX2e}[2005/12/01]
```

as these commands haven't been available in inputenc distributed with older releases of LaTeX.

2 Announcing the files

We announce the files:

```
⟨package⟩\NeedsTeXFormat{LaTeX2e}[1995/12/01]
⟨package⟩\ProvidesPackage{inputenc}
⟨ascii⟩ \ProvidesFile{ascii.def}
⟨latin1⟩ \ProvidesFile{latin1.def}
⟨latin2⟩ \ProvidesFile{latin2.def}
⟨latin3⟩ \ProvidesFile{latin3.def}
⟨latin4⟩ \ProvidesFile{latin4.def}
⟨latin5⟩ \ProvidesFile{latin5.def}
⟨latin9⟩ \ProvidesFile{latin9.def}
⟨latin10⟩ \ProvidesFile{latin10.def}
⟨decmulti⟩ \ProvidesFile{decmulti.def}
⟨cp850⟩  \ProvidesFile{cp850.def}
⟨cp852⟩  \ProvidesFile{cp852.def}
⟨cp858⟩  \ProvidesFile{cp858.def}
⟨cp437⟩  \ProvidesFile{cp437.def}
⟨cp437de⟩  \ProvidesFile{cp437de.def}
⟨cp865⟩  \ProvidesFile{cp865.def}
⟨applemac⟩  \ProvidesFile{applemac.def}
⟨applemacce⟩  \ProvidesFile{macce.def}
⟨next⟩  \ProvidesFile{next.def}
⟨ansinew⟩  \ProvidesFile{ansinew.def}
⟨cp1252&!ansinew⟩  \ProvidesFile{cp1252.def}
⟨cp1250⟩  \ProvidesFile{cp1250.def}
⟨cp1257⟩  \ProvidesFile{cp1257.def}
   [2024/02/08 v1.3d Input encoding file]
⟨cp850⟩%%
⟨cp850⟩%% If you need a Euro symbol, try cp858 instead.
⟨cp850⟩%%
```

3 The package

Before we start with the code, an important comment is in order: as you may or may not know, the `tabbing` environment changes the definition of the commands `\'`, `\`‘, and `\=`. Outside such an environment these commands produce the corresponding accents, inside they are used for special text positioning, and the accents can be accessed using `\a'`, `\a`‘, and `\a=`. Therefore we *must* use the latter instead of the former in the second argument to `\DeclareInputText`, e.g. (from `latin1.def`):

```
\DeclareInputText{224}{\@tabacckludge`a}
```

The command `\@tabacckludge` is defined (in `ltoutenc.dtx`) in such a way that `\@tabacckludge'` will expand to the internal form of `\'`. Thus it is `\'` that is carried around *internally* (the same applies to the other two accent commands).

`\DeclareInputText` `\DeclareInputMath` `\IeC`

These commands declare the expansion of an active character. The math declaration is the usual trick with `\uppercase`. The text declaration is sneakier, since in text space matters. We look to see if the definition ends in a macro, by checking whether it's `\meaning` ends in a space. If it does, then we add an irrelevant `\IeC` and braces around the definition, in order to avoid any space after the active char being gobbled up once the text is written out to an auxiliary file.

The definition should contain only robust commands (and, for correct ligatures and kerning, they must be defined via the interfaces in the fontenc package).

```
⟨*package⟩
\def\DeclareInputMath#1{%
   \@inpenc@test
   \bgroup
      \uccode`\~#1%
      \uppercase{%
   \egroup
      \def~%
   }%
}
\def\DeclareInputText#1#2{%
   \def\reserved@a##1 ${}%
   \def\reserved@b{#2}%
   \ifcat_\expandafter\reserved@a\meaning\reserved@b$ $_%
      \DeclareInputMath{#1}{#2}%
   \else
      \DeclareInputMath{#1}{\IeC{#2}}%
   \fi
}
```

The definition of `\IeC` was modified not to insert a `\protect` unless it is needed, this means it works in `\hyphenation` commands, and other such delicate places. It was then further changed to never insert a `\protect` as one is never needed; this makes it work in even more places.

This still needs some attention.

```
\def\IeC{%
  \ifx\protect\@typeset@protect
    \expandafter\@firstofone
```

```
  \else
    \noexpand\IeC
  \fi
}
```

`\inputencoding` This sets the encoding to be `#1`. It first sets all the characters 128–255 to be active (and sets their initial definition to be `\@inpenc@undefined`). It now also does this for some 'low' codes below 32, but misses out Null, control-I, control-J, control-L and control-M.

It then inputs `#1.def`. But it first sets up a test that produces a warning message if no suitable definitions get read.

```
\ifx\Umathcode\@undefined

\def\inputencoding#1{%
  \edef\reserved@a{#1}%
  \ifx\reserved@a\inputencodingname
  \else
```

We start with a hook to be executed before the encoding change happens.

```
  \the\inpenc@prehook
  \gdef\@inpenc@test{\global\let\@inpenc@test\relax}%
```

Keyboard characters which don't get a definition will be mapped to the command `\@inpenc@undefined` which gets a definition producing an error message indicating in which input encoding the current keyboard character is undefined:

```
  \edef\@inpenc@undefined{\noexpand\protect\noexpand\@inpenc@undefined@{#1}}%
```

The `\edef` in the above definition is essential as `#1` may be `\CurrentOption` in which case a later use would return incorrect information (at best nothing).

For external lookup by other packages we also store the new encoding name in a user accessible macro.

```
  \edef\inputencodingname{#1}%
```

Now we make all potential input characters active.

```
  \@inpenc@loop\^^A\^^H%
  \@inpenc@loop\^^K\^^K%
  \@inpenc@loop\^^N\^^_%
  \@inpenc@loop\^^?\^^ff%
```

To be able to process the input encoding file in horizontal mode we need to ensure that we don't get any stray spaces into the horizontal mode or else we end up with extra space in the paragraph.

```
  \xdef\saved@endlinechar@code{\the\endlinechar}%
  \endlinechar\m@ne
  \xdef\saved@space@catcode{\the\catcode`\ }%
  \catcode`\ 9\relax
  \xdef\saved@at@catcode{\the\catcode`\@}%
  \makeatletter
  \xdef\saved@percent@catcode{\the\catcode`\%}%
  \catcode`\%14\relax
  \input{#1.def}%
  \endlinechar\saved@endlinechar@code\relax
  \catcode`\ \saved@space@catcode\relax
  \catcode`\@\saved@at@catcode\relax
  \catcode`\%\saved@percent@catcode\relax
```

If there have been no \DeclareInputText or \DeclareInputMath commands read then something is amiss.

```
\ifx\@inpenc@test\relax\else
  \PackageWarning{inputenc}%
            {No characters defined\MessageBreak
             by input encoding change to ‘#1’\MessageBreak}%
\fi
```

We finish with a hook to be executed after the encoding change happens.

```
\the\inpenc@posthook
\fi
}
\else
```

Unicode based TeX engines do not require this package at all, and always use UTF-8 input. Allow the package to be used if [utf8] or [ascii] options are used to simplify switching between TeX engines.

```
\def\inputencoding#1{%
\edef\reserved@a{#1}%
\def\reserved@b{utf8x}%
\ifx\reserved@a\reserved@b\def\reserved@a{utf8}\fi
\def\reserved@b{utf8}%
\ifx\reserved@a\reserved@b
\PackageWarningNoLine
    {inputenc}%
    {inputenc package ignored with utf8 based engines}%
\else
\def\reserved@b{x-ascii}%
\ifx\reserved@a\reserved@b\def\reserved@a{ascii}\fi
\def\reserved@b{ascii}%
\ifx\reserved@a\reserved@b
\PackageWarningNoLine
    {inputenc}%
    {inputenc can’t be used to ensure 7bit clean source\MessageBreak
    with a utf engine: Package ignored: utf8 assumed}%
\else
\PackageError
    {inputenc}%
    {inputenc is not designed for xetex or luatex.\MessageBreak
     only UTF-8 supported}%
    {For xelatex or lualatex save the document in UTF-8 encoding\MessageBreak
    and do not use inputenc, or use the [utf8] option.}
\fi
\fi
}
\fi
```

\inpenc@prehook
\inpenc@posthook

Two hooks to be executed before and after an encoding changes happened.

```
\ifx\inpenc@prehook\@undefined\newtoks\inpenc@prehook\fi
\ifx\inpenc@posthook\@undefined\newtoks\inpenc@posthook\fi
```

\@inpenc@undefined@

This command will assigned to any active character unless it get a proper definition by the encoding. The argument is the current encoding name.

```
\def\@inpenc@undefined@#1{\PackageError{inputenc}%
        {Keyboard character used is undefined\MessageBreak
         in inputencoding ‘#1’}%
       {You need to provide a  definition with
        \noexpand\DeclareInputText\MessageBreak or
        \noexpand\DeclareInputMath before using this key.}}%
```

`\@inpenc@loop` Make characters `#1` to `#2` inclusive active and undefined.

```
\def\@inpenc@loop#1#2{%
  \@tempcnta‘#1\relax
  \loop
    \catcode\@tempcnta\active
    \bgroup
      \uccode‘\~\@tempcnta
      \uppercase{%
    \egroup
        \let~\@inpenc@undefined
      }%
  \ifnum\@tempcnta<‘#2\relax
     \advance\@tempcnta\@ne
  \repeat}
```

Then for each option, we input that encoding file. Only exception: for utf8x (from `ucs` package) we first restore the raw input encoding. That should be moved to the `utf8x.def` file, eventually. In case of a rollback `\UseRawInputEncoding` is not defined so we only input the encoding.

```
\DeclareOption{utf8x}{\ifdefined\UseRawInputEncoding
                        \UseRawInputEncoding
                      \fi
                      \inputencoding{\CurrentOption}}
\DeclareOption*{\inputencoding{\CurrentOption}}
\ProcessOptions
```

⟨/package⟩

4 Default definitions for characters

Some input characters map to internal functions which are not in either the `T1` or `OT1` font encoding. For this reason default definitions are provided in the encoding file: these will be used unless some other output encoding is used which supports those glyphs. In some cases this default definition has to be simply an error message.

Note that this works reasonably well only because the encoding files for both `OT1` and `T1` are loaded in the standard LaTeX format.

The name `\textblacksquare` is derived from the AMS symbol name since Adobe seem not to want this symbol. The default definition, as a rule, makes no claim to being a good design.

Some entries are repeated in case guards must all be on one line.

⟨∗latin1 | decmulti | latin2 | latin3 | latin4 | latin5 | latin9 | applemacce | latin10⟩

```
\ProvideTextCommandDefault{\textdegree}{\ensuremath{{^\circ}}}
```

⟨/latin1 | decmulti | latin2 | latin3 | latin4 | latin5 | latin9 | applemacce | latin10⟩

⟨∗cp850 | cp858 | cp852 | cp865 | cp437 | cp437de | applemac | cp1252 | cp1250 | cp1257 | next⟩

```
\ProvideTextCommandDefault{\textdegree}{\ensuremath{{^\circ}}}
⟨/cp850 | cp858 | cp852 | cp865 | cp437 | cp437de | applemac | cp1252 | cp1250 | cp1257 | next⟩
⟨*latin1 | decmulti | latin3 | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1257 | next⟩
\ProvideTextCommandDefault{\textonehalf}{\ensuremath{\frac12}}
⟨/latin1 | decmulti | latin3 | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1257 | next⟩
⟨*latin1 | decmulti | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1257 | next⟩
\ProvideTextCommandDefault{\textonequarter}{\ensuremath{\frac14}}
⟨/latin1 | decmulti | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1257 | next⟩
⟨*latin1 | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1257 | next⟩
\ProvideTextCommandDefault{\textthreequarters}{\ensuremath{\frac34}}
⟨/latin1 | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1257 | next⟩
⟨*applemac | cp850 | cp858 | cp865 | cp437 | cp437de | cp1252 | next⟩
\ProvideTextCommandDefault{\textflorin}{\textit{f}}
⟨/applemac | cp850 | cp858 | cp865 | cp437 | cp437de | cp1252 | next⟩
⟨*cp865 | cp437 | cp437de⟩
\ProvideTextCommandDefault{\textpeseta}{Pt}
⟨/cp865 | cp437 | cp437de⟩
⟨*cp850 | cp858 | cp852 | cp865 | cp437 | cp437de⟩
\ProvideTextCommandDefault{\textblacksquare}
{\vrule \@width .3em \@height .4em \@depth -.1em\relax}
⟨/cp850 | cp858 | cp852 | cp865 | cp437 | cp437de⟩
```

Some commands can't be faked, so we have them generate an error message.

```
⟨*latin1 | decmulti | latin5 | latin9 | cp850 | cp858 | cp865 | cp437 | cp437de⟩
\ProvideTextCommandDefault{\textcent}
    {\TextSymbolUnavailable\textcent}
\ProvideTextCommandDefault{\textyen}
    {\TextSymbolUnavailable\textyen}
⟨/latin1 | decmulti | latin5 | latin9 | cp850 | cp858 | cp865 | cp437 | cp437de⟩
⟨*applemac | cp1252 | next⟩
\ProvideTextCommandDefault{\textcent}
    {\TextSymbolUnavailable\textcent}
\ProvideTextCommandDefault{\textyen}
    {\TextSymbolUnavailable\textyen}
⟨/applemac | cp1252 | next⟩
⟨*cp1257⟩
\ProvideTextCommandDefault{\textcent}
    {\TextSymbolUnavailable\textcent}
⟨/cp1257⟩
⟨*latin9 | cp1252 | cp1257 | latin10⟩
\ProvideTextCommandDefault{\texteuro}
    {\TextSymbolUnavailable\texteuro}
⟨/latin9 | cp1252 | cp1257 | latin10⟩
⟨*latin1 | decmulti | latin2 | latin3 | latin4 | latin5 | cp850 | cp858 | cp852 | cp865⟩
\ProvideTextCommandDefault{\textcurrency}
    {\TextSymbolUnavailable\textcurrency}
⟨/latin1 | decmulti | latin2 | latin3 | latin4 | latin5 | cp850 | cp858 | cp852 | cp865⟩
⟨*applemac | cp1252 | cp1250 | cp1257 | next⟩
\ProvideTextCommandDefault{\textcurrency}
    {\TextSymbolUnavailable\textcurrency}
⟨/applemac | cp1252 | cp1250 | cp1257 | next⟩
⟨*latin1 | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1250 | cp1257⟩
\ProvideTextCommandDefault{\textbrokenbar}
    {\TextSymbolUnavailable\textbrokenbar}
⟨/latin1 | latin5 | cp850 | cp858 | cp852 | cp1252 | cp1250 | cp1257⟩
```

```
⟨*latin3⟩
\ProvideTextCommandDefault{\textmalteseH}
    {\TextSymbolUnavailable\textmalteseH}
\ProvideTextCommandDefault{\textmalteseh}
    {\TextSymbolUnavailable\textmalteseh}
⟨/latin3⟩
⟨*latin4⟩
\ProvideTextCommandDefault{\textkra}
  {\TextSymbolUnavailable\textkra}
\ProvideTextCommandDefault{\textTstroke}
  {\TextSymbolUnavailable\textTstroke}
\ProvideTextCommandDefault{\texttstroke}
  {\TextSymbolUnavailable\texttstroke}
⟨/latin4⟩
⟨*cp1250 | cp1252 | cp1257 | applemac | next⟩
\ProvideTextCommandDefault{\textperthousand}
    {\TextSymbolUnavailable\textperthousand}
⟨/cp1250 | cp1252 | cp1257 | applemac | next⟩
⟨*applemacce⟩
\ProvideTextCommandDefault{\textdiv}
    {\TextSymbolUnavailable\textdiv}
⟨/applemacce⟩
```

Characters that are supposed to be used only in math will be defined by `\providecommand` because LaTeX 2ε assumes that the font encoding for math fonts is static.

```
⟨*latin1 | decmulti | latin5 | latin9 | cp850 | cp858 | cp1252 | cp1257 | next⟩
\providecommand{\mathonesuperior}{{^1}}
⟨/latin1 | decmulti | latin5 | latin9 | cp850 | cp858 | cp1252 | cp1257 | next⟩
⟨*latin1 | decmulti | latin3 | latin5 | latin9 | cp850 | cp858 | cp1252 | cp1257 | next⟩
\providecommand{\maththreesuperior}{{^3}}
⟨/latin1 | decmulti | latin3 | latin5 | latin9 | cp850 | cp858 | cp1252 | cp1257 | next⟩
⟨*latin1 | decmulti | latin3 | latin5 | latin9 | cp850 | cp858 | cp865 | cp437 | cp437de⟩
\providecommand{\mathtwosuperior}{{^2}}
⟨/latin1 | decmulti | latin3 | latin5 | latin9 | cp850 | cp858 | cp865 | cp437 | cp437de⟩
⟨*cp1252 | cp1257 | next⟩
\providecommand{\mathtwosuperior}{{^2}}
⟨/cp1252 | cp1257 | next⟩
⟨*cp865 | cp437 | cp437de⟩
\providecommand{\mathnsuperior}{{^n}}
⟨/cp865 | cp437 | cp437de⟩
```

5 The ASCII encoding

The ASCII encoding only allows characters in the range 32–127, so we only need to provide a more or less empty `.def` file. But we suppress the warning that would normally appear if there are no encoding definitions.

```
⟨ascii⟩\@inpenc@test
```

6 The ISO Latin-2 encoding

The ISO Latin-2 encoding file defines the characters in the ISO 8859-2 encoding. It was contributed by Petr Sojka (`sojka@muni.cz`) with small technical updates by Frank Mittelbach.

```
⟨*latin2⟩
\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{176}{\textdegree}
\DeclareInputText{161}{\k A}
\DeclareInputText{177}{\k a}
\DeclareInputText{162}{\u{}}
\DeclareInputText{178}{\k\ }
\DeclareInputText{163}{\L}
\DeclareInputText{179}{\l}
\DeclareInputText{164}{\textcurrency}
\DeclareInputText{180}{\@tabacckludge'{}}
\DeclareInputText{165}{\v L}
\DeclareInputText{181}{\v l}
\DeclareInputText{166}{\@tabacckludge'S}
\DeclareInputText{182}{\@tabacckludge's}
\DeclareInputText{167}{\S}
\DeclareInputText{183}{\v{}}
\DeclareInputText{168}{\"{}}
\DeclareInputText{184}{\c\ }
\DeclareInputText{169}{\v S}
\DeclareInputText{185}{\v s}
\DeclareInputText{170}{\c S}
\DeclareInputText{186}{\c s}
\DeclareInputText{171}{\v T}
\DeclareInputText{187}{\v t}
\DeclareInputText{172}{\@tabacckludge'Z}
\DeclareInputText{188}{\@tabacckludge'z}
\DeclareInputText{173}{\-}
\DeclareInputText{189}{\H{}}
\DeclareInputText{174}{\v Z}
\DeclareInputText{190}{\v z}
\DeclareInputText{175}{\.Z}
\DeclareInputText{191}{\.z}

\DeclareInputText{192}{\@tabacckludge'R}
\DeclareInputText{208}{\DJ}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{209}{\@tabacckludge'N}
\DeclareInputText{194}{\^A}
\DeclareInputText{210}{\v N}
\DeclareInputText{195}{\u A}
\DeclareInputText{211}{\@tabacckludge'O}
\DeclareInputText{196}{\"A}
\DeclareInputText{212}{\^O}
\DeclareInputText{197}{\@tabacckludge'L}
\DeclareInputText{213}{\H O}
\DeclareInputText{198}{\@tabacckludge'C}
\DeclareInputText{214}{\"O}
\DeclareInputText{199}{\c C}
```

```
\DeclareInputMath{215}{\times}
\DeclareInputText{200}{\v C}
\DeclareInputText{216}{\v R}
\DeclareInputText{201}{\@tabacckludge'E}
\DeclareInputText{217}{\r U}
\DeclareInputText{202}{\k E}
\DeclareInputText{218}{\@tabacckludge'U}
\DeclareInputText{203}{\"E}
\DeclareInputText{219}{\H U}
\DeclareInputText{204}{\v E}
\DeclareInputText{220}{\"U}
\DeclareInputText{205}{\@tabacckludge'I}
\DeclareInputText{221}{\@tabacckludge'Y}
\DeclareInputText{206}{\^I}
\DeclareInputText{222}{\c T}
\DeclareInputText{207}{\v D}
\DeclareInputText{223}{\ss}
\DeclareInputText{224}{\@tabacckludge'r}
\DeclareInputText{240}{\dj}
\DeclareInputText{225}{\@tabacckludge'a}
\DeclareInputText{241}{\@tabacckludge'n}
\DeclareInputText{226}{\^a}
\DeclareInputText{242}{\v n}
\DeclareInputText{227}{\u a}
\DeclareInputText{243}{\@tabacckludge'o}
\DeclareInputText{228}{\"a}
\DeclareInputText{244}{\^o}
\DeclareInputText{229}{\@tabacckludge'l}
\DeclareInputText{245}{\H o}
\DeclareInputText{230}{\@tabacckludge'c}
\DeclareInputText{246}{\"o}
\DeclareInputText{231}{\c c}
\DeclareInputMath{247}{\div}
\DeclareInputText{232}{\v c}
\DeclareInputText{248}{\v r}
\DeclareInputText{233}{\@tabacckludge'e}
\DeclareInputText{249}{\r u}
\DeclareInputText{234}{\k e}
\DeclareInputText{250}{\@tabacckludge'u}
\DeclareInputText{235}{\"e}
\DeclareInputText{251}{\H u}
\DeclareInputText{236}{\v e}
\DeclareInputText{252}{\"u}
\DeclareInputText{237}{\@tabacckludge'\i}
\DeclareInputText{253}{\@tabacckludge'y}
\DeclareInputText{238}{\^\i}
\DeclareInputText{254}{\c t}
\DeclareInputText{239}{\v d}
\DeclareInputText{255}{\.{}}
```
⟨/latin2⟩

7 The ISO Latin-3 encoding

The ISO Latin-3 encoding file defines the characters in the ISO 8859-3 encoding. It was contributed by Jörg Knappen (joerg.knappen@uni-mainz.de) and adapted by Chris Rowley.

It can be used for general purpose applications in typical office environments in the following languages: Afrikaans, Catalan, English, Esperanto, French, Galician, German, Italian, Maltese, and Turkish.

```
⟨*latin3⟩
\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{176}{\textdegree}
\DeclareInputText{161}{\textmalteseH}
\DeclareInputText{177}{\textmalteseh}
\DeclareInputText{162}{\u{}}
\DeclareInputMath{178}{\mathtwosuperior}
\DeclareInputText{163}{\pounds}
\DeclareInputMath{179}{\maththreesuperior}
\DeclareInputText{164}{\textcurrency}
\DeclareInputText{180}{\@tabacckludge'{}}
% \DeclareInputText{165}{\notdef}
\DeclareInputMath{181}{\mu}
\DeclareInputText{166}{\^H}
% NOT: \DeclareInputText{182}{h\llap{\^{}}} % \^h would be too tall
\DeclareInputText{182}{\^h}
\DeclareInputText{167}{\S}
\DeclareInputText{183}{\textperiodcentered}
\DeclareInputText{168}{\"{}}
\DeclareInputText{184}{\c\ }
\DeclareInputText{169}{\.I}
\DeclareInputText{185}{\i}
\DeclareInputText{170}{\c S}
\DeclareInputText{186}{\c s}
\DeclareInputText{171}{\u G}
\DeclareInputText{187}{\u g}
\DeclareInputText{172}{\^J}
\DeclareInputText{188}{\^\j}
\DeclareInputText{173}{\-}
\DeclareInputText{189}{\textonehalf}
% \DeclareInputText{174}{\notdef}
% \DeclareInputText{190}{\notdef}
\DeclareInputText{175}{\.Z}
\DeclareInputText{191}{\.z}

\DeclareInputText{192}{\@tabacckludge`A}
% \DeclareInputText{208}{\notdef}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{209}{\~N}
\DeclareInputText{194}{\^A}
\DeclareInputText{210}{\@tabacckludge`O}
% \DeclareInputText{195}{\notdef}
\DeclareInputText{211}{\@tabacckludge'O}
\DeclareInputText{196}{\"A}
\DeclareInputText{212}{\^O}
\DeclareInputText{197}{\.C}
```

```
\DeclareInputText{213}{\.G}
\DeclareInputText{198}{\^C}
\DeclareInputText{214}{\"O}
\DeclareInputText{199}{\c C}
\DeclareInputMath{215}{\times}
\DeclareInputText{200}{\@tabacckludge‘E}
\DeclareInputText{216}{\^G}
\DeclareInputText{201}{\@tabacckludge’E}
\DeclareInputText{217}{\@tabacckludge‘U}
\DeclareInputText{202}{\^E}
\DeclareInputText{218}{\@tabacckludge’U}
\DeclareInputText{203}{\"E}
\DeclareInputText{219}{\^U}
\DeclareInputText{204}{\@tabacckludge‘I}
\DeclareInputText{220}{\"U}
\DeclareInputText{205}{\@tabacckludge’I}
\DeclareInputText{221}{\u U}
\DeclareInputText{206}{\^I}
\DeclareInputText{222}{\^S}
\DeclareInputText{207}{\"I}
\DeclareInputText{223}{\ss}

\DeclareInputText{224}{\@tabacckludge‘a}
% \DeclareInputText{240}{\notdef}
\DeclareInputText{225}{\@tabacckludge’a}
\DeclareInputText{241}{\~n}
\DeclareInputText{226}{\^a}
\DeclareInputText{242}{\@tabacckludge‘o}
% \DeclareInputText{227}{\notdef}
\DeclareInputText{243}{\@tabacckludge’o}
\DeclareInputText{228}{\"a}
\DeclareInputText{244}{\^o}
\DeclareInputText{229}{\.c}
\DeclareInputText{245}{\.g}
\DeclareInputText{230}{\^c}
\DeclareInputText{246}{\"o}
\DeclareInputText{231}{\c c}
\DeclareInputMath{247}{\div}
\DeclareInputText{232}{\@tabacckludge‘e}
\DeclareInputText{248}{\^g}
\DeclareInputText{233}{\@tabacckludge’e}
\DeclareInputText{249}{\@tabacckludge‘u}
\DeclareInputText{234}{\^e}
\DeclareInputText{250}{\@tabacckludge’u}
\DeclareInputText{235}{\"e}
\DeclareInputText{251}{\^u}
\DeclareInputText{236}{\@tabacckludge‘\i}
\DeclareInputText{252}{\"u}
\DeclareInputText{237}{\@tabacckludge’\i}
\DeclareInputText{253}{\u u}
\DeclareInputText{238}{\^\i}
\DeclareInputText{254}{\^s}
\DeclareInputText{239}{\"\i}
\DeclareInputText{255}{\.{}}
```
⟨/latin3⟩

8 The ISO Latin-4 encoding

The ISO Latin-4 encoding file defines the characters in the ISO 8859-4 encoding. It was contributed by Hana Skoumalová (`hana.skoumalova@ff.cuni.cz`).

It was created for Estonian, Latvian, Lithuanian, Finnish, Lappish, Swedish, Norwegian, Danish, Icelandic and Greenlandic Inuit. Some alphabets, however, are incomplete (Greenlandic, Icelandic and Lappish). Some glyphs are not available in the fonts. For example, the Greenlandic character 'kra' is not available at all; the Latvian and Lithuanian characters not contained in other encodings are constructed from components and they do not look good.

```
⟨*latin4⟩
\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{161}{\k A}
\DeclareInputText{162}{\textkra}%% Greenlandic Inuit
\DeclareInputText{163}{\c R}
\DeclareInputText{164}{\textcurrency}
\DeclareInputText{165}{\~I}
\DeclareInputText{166}{\c L}
\DeclareInputText{167}{\S}
\DeclareInputText{168}{\"{}}
\DeclareInputText{169}{\v S}
\DeclareInputText{170}{\@tabacckludge=E}
\DeclareInputText{171}{\c G}
\DeclareInputText{172}{\textTstroke}%% Northern Sami
\DeclareInputText{173}{\-}
\DeclareInputText{174}{\v Z}
\DeclareInputText{175}{\@tabacckludge={}}
\DeclareInputText{176}{\textdegree}
\DeclareInputText{177}{\k a}
\DeclareInputText{178}{\k\ }
\DeclareInputText{179}{\c r}
\DeclareInputText{180}{\@tabacckludge'{}}
\DeclareInputText{181}{\~\i}
\DeclareInputText{182}{\c l}
\DeclareInputText{183}{\v{}}
\DeclareInputText{184}{\c\ }
\DeclareInputText{185}{\v s}
\DeclareInputText{186}{\@tabacckludge=e}
\DeclareInputText{187}{\c g}
\DeclareInputText{188}{\texttstroke}%% Northern Sami
\DeclareInputText{189}{\NG}
\DeclareInputText{190}{\v z}
\DeclareInputText{191}{\ng}

\DeclareInputText{192}{\@tabacckludge=A}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{194}{\^A}
\DeclareInputText{195}{\~A}
\DeclareInputText{196}{\"A}
\DeclareInputText{197}{\r A}
\DeclareInputText{198}{\AE}
\DeclareInputText{199}{\k I}
\DeclareInputText{200}{\v C}
\DeclareInputText{201}{\@tabacckludge'E}
```

```
\DeclareInputText{202}{\k E}
\DeclareInputText{203}{\"E}
\DeclareInputText{204}{\.{E}}
\DeclareInputText{205}{\@tabacckludge'I}
\DeclareInputText{206}{\^I}
\DeclareInputText{207}{\@tabacckludge=I}
\DeclareInputText{208}{\DJ}
\DeclareInputText{209}{\c N}
\DeclareInputText{210}{\@tabacckludge=O}
\DeclareInputText{211}{\c K}
\DeclareInputText{212}{\^O}
\DeclareInputText{213}{\~O}
\DeclareInputText{214}{\"O}
\DeclareInputMath{215}{\times}
\DeclareInputText{216}{\O}
\DeclareInputText{217}{\k U}
\DeclareInputText{218}{\@tabacckludge'U}
\DeclareInputText{219}{\^U}
\DeclareInputText{220}{\"U}
\DeclareInputText{221}{\~U}
\DeclareInputText{222}{\@tabacckludge=U}
\DeclareInputText{223}{\ss}

\DeclareInputText{224}{\@tabacckludge=a}
\DeclareInputText{225}{\@tabacckludge'a}
\DeclareInputText{226}{\^a}
\DeclareInputText{227}{\~a}
\DeclareInputText{228}{\"a}
\DeclareInputText{229}{\r a}
\DeclareInputText{230}{\ae}
\DeclareInputText{231}{\k i}
\DeclareInputText{232}{\v c}
\DeclareInputText{233}{\@tabacckludge'e}
\DeclareInputText{234}{\k e}
\DeclareInputText{235}{\"e}
\DeclareInputText{236}{\.{e}}
\DeclareInputText{237}{\@tabacckludge'\i}
\DeclareInputText{238}{\^\i}
\DeclareInputText{239}{\@tabacckludge=\i}
\DeclareInputText{240}{\dj}
\DeclareInputText{241}{\c n}
\DeclareInputText{242}{\@tabacckludge=o}
\DeclareInputText{243}{\c k}
\DeclareInputText{244}{\^o}
\DeclareInputText{245}{\~o}
\DeclareInputText{246}{\"o}
\DeclareInputMath{247}{\div}
\DeclareInputText{248}{\o}
\DeclareInputText{249}{\k u}
\DeclareInputText{250}{\@tabacckludge'u}
\DeclareInputText{251}{\^u}
\DeclareInputText{252}{\"u}
\DeclareInputText{253}{\~u}
\DeclareInputText{254}{\@tabacckludge=u}
\DeclareInputText{255}{\.{}}
```

⟨/latin4⟩

9 The ISO Latin-5 encoding

The ISO Latin-5 encoding file defines the characters in the ISO 8859-9 encoding, which describes Latin Alphabet No. 5. It was contributed by H. Turgut Uyar (uyar@cs.itu.edu.tr); it is used for Turkish.

⟨*latin5⟩

```
\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{176}{\textdegree}
\DeclareInputText{161}{\textexclamdown}
\DeclareInputMath{177}{\pm}
\DeclareInputText{162}{\textcent}
\DeclareInputMath{178}{\mathtwosuperior}
\DeclareInputText{163}{\pounds}
\DeclareInputMath{179}{\maththreesuperior}
\DeclareInputText{164}{\textcurrency}
\DeclareInputText{180}{\@tabacckludge'{}}
\DeclareInputText{165}{\textyen}
\DeclareInputMath{181}{\mu}
\DeclareInputText{166}{\textbrokenbar}
\DeclareInputText{182}{\P}
\DeclareInputText{167}{\S}
\DeclareInputText{183}{\textperiodcentered}
\DeclareInputText{168}{\"{}}
\DeclareInputText{184}{\c\ }
\DeclareInputText{169}{\copyright}
\DeclareInputMath{185}{\mathonesuperior}
\DeclareInputText{170}{\textordfeminine}
\DeclareInputText{186}{\textordmasculine}
\DeclareInputText{171}{\guillemetleft}
\DeclareInputText{187}{\guillemetright}
\DeclareInputMath{172}{\lnot}
\DeclareInputText{188}{\textonequarter}
\DeclareInputText{173}{\-}
\DeclareInputText{189}{\textonehalf}
\DeclareInputText{174}{\textregistered}
\DeclareInputText{190}{\textthreequarters}
\DeclareInputText{175}{\@tabacckludge={}}
\DeclareInputText{191}{\textquestiondown}

\DeclareInputText{192}{\@tabacckludge`A}
\DeclareInputText{208}{\u G}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{209}{\~N}
\DeclareInputText{194}{\^A}
\DeclareInputText{210}{\@tabacckludge`O}
\DeclareInputText{195}{\~A}
\DeclareInputText{211}{\@tabacckludge'O}
\DeclareInputText{196}{\"A}
\DeclareInputText{212}{\^O}
\DeclareInputText{197}{\r A}
\DeclareInputText{213}{\~O}
```

```
\DeclareInputText{198}{\AE}
\DeclareInputText{214}{\"O}
\DeclareInputText{199}{\c C}
\DeclareInputMath{215}{\times}
\DeclareInputText{200}{\@tabacckludge‘E}
\DeclareInputText{216}{\O}
\DeclareInputText{201}{\@tabacckludge’E}
\DeclareInputText{217}{\@tabacckludge‘U}
\DeclareInputText{202}{\^E}
\DeclareInputText{218}{\@tabacckludge’U}
\DeclareInputText{203}{\"E}
\DeclareInputText{219}{\^U}
\DeclareInputText{204}{\@tabacckludge‘I}
\DeclareInputText{220}{\"U}
\DeclareInputText{205}{\@tabacckludge’I}
\DeclareInputText{221}{\.I}
\DeclareInputText{206}{\^I}
\DeclareInputText{222}{\c S}
\DeclareInputText{207}{\"I}
\DeclareInputText{223}{\ss}
\DeclareInputText{224}{\@tabacckludge‘a}
\DeclareInputText{240}{\u g}
\DeclareInputText{225}{\@tabacckludge’a}
\DeclareInputText{241}{\~n}
\DeclareInputText{226}{\^a}
\DeclareInputText{242}{\@tabacckludge‘o}
\DeclareInputText{227}{\~a}
\DeclareInputText{243}{\@tabacckludge’o}
\DeclareInputText{228}{\"a}
\DeclareInputText{244}{\^o}
\DeclareInputText{229}{\r a}
\DeclareInputText{245}{\~o}
\DeclareInputText{230}{\ae}
\DeclareInputText{246}{\"o}
\DeclareInputText{231}{\c c}
\DeclareInputMath{247}{\div}
\DeclareInputText{232}{\@tabacckludge‘e}
\DeclareInputText{248}{\o}
\DeclareInputText{233}{\@tabacckludge’e}
\DeclareInputText{249}{\@tabacckludge‘u}
\DeclareInputText{234}{\^e}
\DeclareInputText{250}{\@tabacckludge’u}
\DeclareInputText{235}{\"e}
\DeclareInputText{251}{\^u}
\DeclareInputText{236}{\@tabacckludge‘\i}
\DeclareInputText{252}{\"u}
\DeclareInputText{237}{\@tabacckludge’\i}
\DeclareInputText{253}{\i}
\DeclareInputText{238}{\^\i}
\DeclareInputText{254}{\c s}
\DeclareInputText{239}{\"\i}
\DeclareInputText{255}{\"y}
⟨/latin5⟩
```

10 DEC Multinational Character Set

The DECMultinational character set, used by the OpenVMS operating system, is slightly different from the ISO Latin 1 character set.

Reference: Digital Equipment Corporation VT330/VT340 Programmer Reference Manual, Volume 1: Text Programming, page 22.

This encoding was provided by M.Y. Chartoire IPNL-IN2P3
m.chartoire@ipnl.in2p3.fr

```
⟨*decmulti⟩
\DeclareInputText{176}{\textdegree}
\DeclareInputText{161}{\textexclamdown}
\DeclareInputMath{177}{\pm}
\DeclareInputText{162}{\textcent}
\DeclareInputMath{178}{\mathtwosuperior}
\DeclareInputText{163}{\pounds}
\DeclareInputMath{179}{\maththreesuperior}
\DeclareInputText{165}{\textyen}
\DeclareInputMath{181}{\mu}
\DeclareInputText{182}{\P}
\DeclareInputText{167}{\S}
\DeclareInputText{183}{\textperiodcentered}
\DeclareInputText{168}{\textcurrency}
\DeclareInputText{169}{\copyright}
\DeclareInputMath{185}{\mathonesuperior}
\DeclareInputText{170}{\textordfeminine}
\DeclareInputText{186}{\textordmasculine}
\DeclareInputText{171}{\guillemetleft}
\DeclareInputText{187}{\guillemetright}
\DeclareInputText{188}{\textonequarter}
\DeclareInputText{189}{\textonehalf}
\DeclareInputText{191}{\textquestiondown}
\DeclareInputText{192}{\@tabacckludge`A}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{209}{\~N}
\DeclareInputText{194}{\^A}
\DeclareInputText{210}{\@tabacckludge`O}
\DeclareInputText{195}{\~A}
\DeclareInputText{211}{\@tabacckludge'O}
\DeclareInputText{196}{\"A}
\DeclareInputText{212}{\^O}
\DeclareInputText{197}{\r A}
\DeclareInputText{213}{\~O}
\DeclareInputText{198}{\AE}
\DeclareInputText{214}{\"O}
\DeclareInputText{199}{\c C}
\DeclareInputText{215}{\OE}
\DeclareInputText{200}{\@tabacckludge`E}
\DeclareInputText{216}{\O}
\DeclareInputText{201}{\@tabacckludge'E}
\DeclareInputText{217}{\@tabacckludge`U}
\DeclareInputText{202}{\^E}
\DeclareInputText{218}{\@tabacckludge'U}
\DeclareInputText{203}{\"E}
```

```
\DeclareInputText{219}{\^U}
\DeclareInputText{204}{\@tabacckludge‘I}
\DeclareInputText{220}{\"U}
\DeclareInputText{205}{\@tabacckludge’I}
\DeclareInputText{221}{\"Y}
\DeclareInputText{206}{\^I}
\DeclareInputText{207}{\"I}
\DeclareInputText{223}{\ss}
\DeclareInputText{224}{\@tabacckludge‘a}
\DeclareInputText{225}{\@tabacckludge’a}
\DeclareInputText{241}{\~n}
\DeclareInputText{226}{\^a}
\DeclareInputText{242}{\@tabacckludge‘o}
\DeclareInputText{227}{\~a}
\DeclareInputText{243}{\@tabacckludge’o}
\DeclareInputText{228}{\"a}
\DeclareInputText{244}{\^o}
\DeclareInputText{229}{\r a}
\DeclareInputText{245}{\~o}
\DeclareInputText{230}{\ae}
\DeclareInputText{246}{\"o}
\DeclareInputText{231}{\c c}
\DeclareInputText{247}{\oe}
\DeclareInputText{232}{\@tabacckludge‘e}
\DeclareInputText{248}{\o}
\DeclareInputText{233}{\@tabacckludge’e}
\DeclareInputText{249}{\@tabacckludge‘u}
\DeclareInputText{234}{\^e}
\DeclareInputText{250}{\@tabacckludge’u}
\DeclareInputText{235}{\"e}
\DeclareInputText{251}{\^u}
\DeclareInputText{236}{\@tabacckludge‘\i}
\DeclareInputText{252}{\"u}
\DeclareInputText{237}{\@tabacckludge’\i}
\DeclareInputText{253}{\"y}
\DeclareInputText{238}{\^\i}
\DeclareInputText{239}{\"\i}
⟨/decmulti⟩
```

11 The IBM code pages 850 and 858

This input encoding was contributed by Timo Knuutila (knuutila@cs.utu.fi), and edited by Christian Bartels (ii140ba@vm1.rz.rwth-aachen.de).

The DOS graphics ‘letters’ and a few other positions are ignored (left undefined).

The 858 code page is identical to the 850 except that

```
⟨*cp850 | cp858⟩
\DeclareInputText{128}{\c C}
\DeclareInputText{144}{\@tabacckludge’E}
\DeclareInputText{129}{\"u}
\DeclareInputText{145}{\ae}
\DeclareInputText{130}{\@tabacckludge’e}
```

```
\DeclareInputText{146}{\AE}
\DeclareInputText{131}{\^a}
\DeclareInputText{147}{\^o}
\DeclareInputText{132}{\"a}
\DeclareInputText{148}{\"o}
\DeclareInputText{133}{\@tabacckludge`a}
\DeclareInputText{149}{\@tabacckludge`o}
\DeclareInputText{134}{\r a}
\DeclareInputText{150}{\^u}
\DeclareInputText{135}{\c c}
\DeclareInputText{151}{\@tabacckludge`u}
\DeclareInputText{136}{\^e}
\DeclareInputText{152}{\"y}
\DeclareInputText{137}{\"e}
\DeclareInputText{153}{\"O}
\DeclareInputText{138}{\@tabacckludge`e}
\DeclareInputText{154}{\"U}
\DeclareInputText{139}{\"\i}
\DeclareInputText{155}{\o}
\DeclareInputText{140}{\^\i}
\DeclareInputText{156}{\pounds}
\DeclareInputText{141}{\@tabacckludge`\i}
\DeclareInputText{157}{\O}
\DeclareInputText{142}{\"A}
\DeclareInputMath{158}{\times}
\DeclareInputText{143}{\r A}
\DeclareInputText{159}{\textflorin}

\DeclareInputText{160}{\@tabacckludge'a}
\DeclareInputText{161}{\@tabacckludge'\i}
\DeclareInputText{162}{\@tabacckludge'o}
\DeclareInputText{163}{\@tabacckludge'u}
\DeclareInputText{164}{\~n}                %% "B0-"B4: DG
\DeclareInputText{165}{\~N}
\DeclareInputText{181}{\@tabacckludge'A}
\DeclareInputText{166}{\textordfeminine}
\DeclareInputText{182}{\^A}
\DeclareInputText{167}{\textordmasculine}
\DeclareInputText{183}{\@tabacckludge`A}
\DeclareInputText{168}{\textquestiondown}
\DeclareInputText{184}{\copyright}
\DeclareInputText{169}{\textregistered}
\DeclareInputMath{170}{\lnot}
\DeclareInputText{171}{\textonehalf}
\DeclareInputText{172}{\textonequarter}   %% "B9-"BC: DG
\DeclareInputText{173}{\textexclamdown}
\DeclareInputText{189}{\textcent}
\DeclareInputText{174}{\guillemetleft}
\DeclareInputText{190}{\textyen}
\DeclareInputText{175}{\guillemetright}

% "BF-"C5: DG
\DeclareInputText{208}{\dh}
\DeclareInputText{209}{\DH}
\DeclareInputText{210}{\^E}
```

```
\DeclareInputText{211}{\"E}
\DeclareInputText{212}{\@tabacckludge‘E}
```

Here is the only point in which the two code pages differ!

```
⟨-cp858⟩\DeclareInputText{213}{\i}
⟨-cp850⟩\DeclareInputText{213}{\texteuro}
```

```
\DeclareInputText{198}{\~a}
\DeclareInputText{214}{\@tabacckludge’I}
\DeclareInputText{199}{\~A}
\DeclareInputText{215}{\^I}
\DeclareInputText{216}{\"I}
% "C8-"CE: DG
% "D9-"DC: DG
\DeclareInputText{221}{\textbrokenbar}
\DeclareInputText{222}{\@tabacckludge‘I}
\DeclareInputText{207}{\textcurrency}  %% "DF: DG
```

```
\DeclareInputText{224}{\@tabacckludge’O}
\DeclareInputText{240}{\-}
\DeclareInputText{225}{\ss}
\DeclareInputMath{241}{\pm}
\DeclareInputText{226}{\^O}
% "F2: DG (not double underline, or equals?)
\DeclareInputText{227}{\@tabacckludge‘O}
\DeclareInputText{243}{\textthreequarters}
\DeclareInputText{228}{\~o}
\DeclareInputText{244}{\P}
\DeclareInputText{229}{\~O}
\DeclareInputText{245}{\S}
\DeclareInputMath{230}{\mu}
\DeclareInputMath{246}{\div}
\DeclareInputText{231}{\th}
\DeclareInputText{247}{\c\ }
\DeclareInputText{232}{\TH}
\DeclareInputText{248}{\textdegree}
\DeclareInputText{233}{\@tabacckludge’U}
\DeclareInputText{249}{\"{}}
\DeclareInputText{234}{\^U}
\DeclareInputText{250}{\textperiodcentered}
\DeclareInputText{235}{\@tabacckludge‘U}
\DeclareInputMath{251}{\mathonesuperior}
\DeclareInputText{236}{\@tabacckludge’y}
\DeclareInputMath{252}{\maththreesuperior}
\DeclareInputText{237}{\@tabacckludge’Y}
\DeclareInputMath{253}{\mathtwosuperior}
\DeclareInputText{238}{\@tabacckludge={}}
\DeclareInputText{254}{\textblacksquare} % right name?
\DeclareInputText{239}{\@tabacckludge’{}}
\DeclareInputText{255}{\nobreakspace}
⟨/cp850 | cp858⟩
```

12 The IBM code page 852

This input encoding was contributed by Petr Sojka (sojka@Muni.cz).

```
⟨*cp852⟩
\DeclareInputText{128}{\c C}
\DeclareInputText{144}{\@tabacckludge'E}
\DeclareInputText{129}{\"u}
\DeclareInputText{145}{\@tabacckludge'L}
\DeclareInputText{130}{\@tabacckludge'e}
\DeclareInputText{146}{\@tabacckludge'l}
\DeclareInputText{131}{\^a}
\DeclareInputText{147}{\^o}
\DeclareInputText{132}{\"a}
\DeclareInputText{148}{\"o}
\DeclareInputText{133}{\r u}
\DeclareInputText{149}{\v L}
\DeclareInputText{134}{\@tabacckludge'c}
\DeclareInputText{150}{\v l}
\DeclareInputText{135}{\c c}
\DeclareInputText{151}{\@tabacckludge'S}
\DeclareInputText{136}{\l}
\DeclareInputText{152}{\@tabacckludge's}
\DeclareInputText{137}{\"e}
\DeclareInputText{153}{\"O}
\DeclareInputText{138}{\H O}
\DeclareInputText{154}{\"U}
\DeclareInputText{139}{\H o}
\DeclareInputText{155}{\v T}
\DeclareInputText{140}{\^\i}
\DeclareInputText{156}{\v t}
\DeclareInputText{141}{\@tabacckludge'Z}
\DeclareInputText{157}{\L}
\DeclareInputText{142}{\"A}
\DeclareInputMath{158}{\times}
\DeclareInputText{143}{\@tabacckludge'C}
\DeclareInputText{159}{\v c}
\DeclareInputText{160}{\@tabacckludge'a}
\DeclareInputText{161}{\@tabacckludge'\i}
\DeclareInputText{162}{\@tabacckludge'o}
\DeclareInputText{163}{\@tabacckludge'u}
\DeclareInputText{164}{\k A}
\DeclareInputText{165}{\k a}
\DeclareInputText{166}{\v Z}
\DeclareInputText{167}{\v z}
\DeclareInputText{168}{\k E}
\DeclareInputText{169}{\k e}
\DeclareInputMath{170}{\lnot}
\DeclareInputText{171}{\@tabacckludge'z}
\DeclareInputText{172}{\v C}
\DeclareInputText{173}{\c s}
\DeclareInputText{174}{\guillemetleft}
\DeclareInputText{175}{\guillemetright}
\DeclareInputText{181}{\@tabacckludge'A}
```

```
\DeclareInputText{182}{\^A}
\DeclareInputText{183}{\v E}
\DeclareInputText{184}{\c S}
\DeclareInputText{189}{\.Z}
\DeclareInputText{190}{\.z}

\DeclareInputText{198}{\u A}
\DeclareInputText{199}{\u a}
\DeclareInputText{207}{\textcurrency}
\DeclareInputText{208}{\dj}
\DeclareInputText{209}{\DJ}
\DeclareInputText{210}{\v D}
\DeclareInputText{211}{\"E}
\DeclareInputText{212}{\v d} % d caron
\DeclareInputText{213}{\v N}
\DeclareInputText{214}{\@tabacckludge'I}
\DeclareInputText{215}{\^I}
\DeclareInputText{216}{\v e}
\DeclareInputText{221}{\c T}
\DeclareInputText{222}{\r U}

\DeclareInputText{224}{\@tabacckludge'O}
\DeclareInputText{240}{\-}
\DeclareInputText{225}{\ss}
\DeclareInputText{241}{\H{}}
\DeclareInputText{226}{\^O}
\DeclareInputText{242}{\k\ }
\DeclareInputText{227}{\@tabacckludge'N}
\DeclareInputText{243}{\v{}}
\DeclareInputText{228}{\@tabacckludge'n}
\DeclareInputText{244}{\u{}}
\DeclareInputText{229}{\v n}
\DeclareInputText{245}{\S}
\DeclareInputText{230}{\v S}
\DeclareInputMath{246}{\div}
\DeclareInputText{231}{\v s}
\DeclareInputText{247}{\c\ }
\DeclareInputText{232}{\@tabacckludge'R}
\DeclareInputText{248}{\textdegree}
\DeclareInputText{233}{\@tabacckludge'U}
\DeclareInputText{249}{\"{}}
\DeclareInputText{234}{\@tabacckludge'r}
\DeclareInputText{250}{\.{}}
\DeclareInputText{235}{\H U}
\DeclareInputText{251}{\H u}
\DeclareInputText{236}{\@tabacckludge'y}
\DeclareInputText{252}{\v R}
\DeclareInputText{237}{\@tabacckludge'Y}
\DeclareInputText{253}{\v r}
\DeclareInputText{238}{\c t}
\DeclareInputText{254}{\textblacksquare} % right name?
\DeclareInputText{239}{\@tabacckludge'{}}
\DeclareInputText{255}{\nobreakspace}
⟨/cp852⟩
```

13 The IBM code pages 437 and 865

This input encoding is based on work by
Volker Kunert (volker@numsun1.mathematik.uni-halle.de)
and bontus@al6000.physik.uni-siegen.de.
The changes for cp865 are based on work by Søren Sandmann (sandmann@daimi.aau.dk), with thanks to them all.

The DOS graphics 'letters' and a few other positions are ignored (left undefined).

Unfortunately, in cp437 there is no agreement as to whether slot E1 should be 'β' or 'ß', so we provide two variants, one (cp437) with 'β' and one (cp437de) with 'ß'.

```
⟨*cp437 | cp437de | cp865⟩
\DeclareInputText{128}{\c C}
\DeclareInputText{129}{\"u}
\DeclareInputText{130}{\@tabacckludge'e}
\DeclareInputText{131}{\^a}
\DeclareInputText{132}{\"a}
\DeclareInputText{133}{\@tabacckludge`a}
\DeclareInputText{134}{\r a}
\DeclareInputText{135}{\c c}
\DeclareInputText{136}{\^e}
\DeclareInputText{137}{\"e}
\DeclareInputText{138}{\@tabacckludge`e}
\DeclareInputText{139}{\"\i}
\DeclareInputText{140}{\^\i}
\DeclareInputText{141}{\@tabacckludge`\i}
\DeclareInputText{142}{\"A}
\DeclareInputText{143}{\r A}
\DeclareInputText{144}{\@tabacckludge'E}
\DeclareInputText{145}{\ae}
\DeclareInputText{146}{\AE}
\DeclareInputText{147}{\^o}
\DeclareInputText{148}{\"o}
\DeclareInputText{149}{\@tabacckludge`o}
\DeclareInputText{150}{\^u}
\DeclareInputText{151}{\@tabacckludge`u}
\DeclareInputText{152}{\"y}
\DeclareInputText{153}{\"O}
\DeclareInputText{154}{\"U}
⟨/cp437 | cp437de | cp865⟩
⟨*cp437 | cp437de⟩
\DeclareInputText{155}{\textcent}
\DeclareInputText{156}{\pounds}
\DeclareInputText{157}{\textyen}
⟨/cp437 | cp437de⟩
⟨*cp865⟩
\DeclareInputText{155}{\o}
\DeclareInputText{156}{\pounds}
\DeclareInputText{157}{\O}
⟨/cp865⟩
⟨*cp437 | cp437de | cp865⟩
\DeclareInputText{158}{\textpeseta} % Pt
```

```
\DeclareInputText{159}{\textflorin}
\DeclareInputText{160}{\@tabacckludge'a} % 160
\DeclareInputText{161}{\@tabacckludge'\i}
\DeclareInputText{162}{\@tabacckludge'o}
\DeclareInputText{163}{\@tabacckludge'u}
\DeclareInputText{164}{\~n}
\DeclareInputText{165}{\~N}
\DeclareInputText{166}{\textordfeminine}
\DeclareInputText{167}{\textordmasculine}
\DeclareInputText{168}{\textquestiondown}
%\DeclareInputText{169}{} % left upper corner
\DeclareInputMath{170}{\lnot}
\DeclareInputText{171}{\textonehalf}
\DeclareInputText{172}{\textonequarter}
\DeclareInputText{173}{\textexclamdown}
\DeclareInputText{174}{\guillemetleft}
⟨cp437 | cp437de⟩\DeclareInputText{175}{\guillemetright}
⟨cp865⟩\DeclareInputText{175}{\textcurrency}
%\DeclareInputText{176}{\textlightgraybox}
%\DeclareInputText{177}{\textgraybox}
%\DeclareInputText{178}{\textdarkgraybox}
%\DeclareInputMath{179}{} % vertical bar
%\DeclareInputText{180}{} % vertical bar with branch to left
%\DeclareInputText{181}{} % vertical bar with double branch to left
%\DeclareInputText{182}{} % double bar with single branch to left
%\DeclareInputText{183}{} % graphic
%\DeclareInputText{184}{} % graphic
%\DeclareInputMath{185}{} % vertical double bar with branch to left
%\DeclareInputMath{186}{} % vertical double bar
%\DeclareInputText{187}{} % double upper right corner
%\DeclareInputMath{188}{} % double lower right corner
%\DeclareInputText{189}{} % graphic
%\DeclareInputText{190}{} % graphic
%\DeclareInputMath{191}{\ensuremath{\rceil}}
%\DeclareInputMath{192}{\ensuremath{\lfloor}}
%\DeclareInputText{193}{} % dash with branch up
%\DeclareInputText{194}{} % dash with branch down
%\DeclareInputText{195}{} % vertical bar with branch to right
%\DeclareInputText{196}{} % horizontal bar, not endash
%\DeclareInputText{197}{} % vertical bar crossed with dash
%\DeclareInputText{198}{} % graphic
%\DeclareInputText{199}{} % graphic
%\DeclareInputText{200}{} % double lower left corner
%\DeclareInputText{201}{} % double upper left corner
%\DeclareInputText{202}{} % double dash with branch up
%\DeclareInputText{203}{} % double dash with branch down
%\DeclareInputText{204}{} % double bar with branch right
%\DeclareInputText{205}{=} % double dash
%\DeclareInputText{206}{} % double bar crossing double dash
%\DeclareInputText{207}{} % graphic
%\DeclareInputMath{208}{}
%\DeclareInputText{209}{}
%\DeclareInputText{210}{}
```

```
%\DeclareInputText{211}{}
%\DeclareInputText{212}{}
%\DeclareInputText{213}{}
%\DeclareInputText{214}{}
%\DeclareInputText{215}{}
%\DeclareInputText{216}{}
%\DeclareInputMath{217}{\ensuremath{\rfloor}} % lower right corner
%\DeclareInputMath{218}{\ensuremath{\lceil}}  % upper left corner
%\DeclareInputText{219}{} % black box
%\DeclareInputText{220}{} % lower half of black box
%\DeclareInputText{221}{} % left bar
%\DeclareInputText{222}{} % right bar
%\DeclareInputText{223}{} % upper half of black box

\DeclareInputMath{224}{\alpha}
⟨/cp437 | cp437de | cp865⟩
⟨cp437 | cp865⟩\DeclareInputMath{225}{\beta}
⟨cp437de⟩\DeclareInputText{225}{\ss}
⟨*cp437 | cp437de | cp865⟩
\DeclareInputMath{226}{\Gamma}
\DeclareInputMath{227}{\pi}
\DeclareInputMath{228}{\Sigma}
\DeclareInputMath{229}{\sigma}
\DeclareInputMath{230}{\mu}
\DeclareInputMath{231}{\gamma}
\DeclareInputMath{232}{\Phi}
\DeclareInputMath{233}{\theta}
\DeclareInputMath{234}{\Omega}
\DeclareInputMath{235}{\delta}
\DeclareInputMath{236}{\infty}
\DeclareInputMath{237}{\phi}
\DeclareInputMath{238}{\varepsilon}
\DeclareInputMath{239}{\cap}
\DeclareInputMath{240}{\equiv}
\DeclareInputMath{241}{\pm}
\DeclareInputMath{242}{\geq}
\DeclareInputMath{243}{\leq}
%\DeclareInputMath{244}{}   % upper part of integral sign
%\DeclareInputMath{245}{}   % lower part of integral sign
\DeclareInputMath{246}{\div}
\DeclareInputMath{247}{\approx}
\DeclareInputText{248}{\textdegree}
\DeclareInputText{249}{\textperiodcentered}
\DeclareInputText{250}{\textbullet}
\DeclareInputMath{251}{\surd}
\DeclareInputMath{252}{\mathnsuperior}
\DeclareInputMath{253}{\mathtwosuperior}
\DeclareInputText{254}{\textblacksquare} % right name?
\DeclareInputText{255}{\nobreakspace}
⟨/cp437 | cp437de | cp865⟩
```

14 The Macintosh encodings

This input encoding was contributed by Constantin Kahn (`kahn@math.toronto.edu`), with minor modifications by Alan Jeffrey.

```
⟨*applemac⟩
\DeclareInputText{128}{\"A}
\DeclareInputText{129}{\r A}
\DeclareInputText{130}{\c C}
\DeclareInputText{131}{\@tabacckludge'E}
\DeclareInputText{132}{\~N}
\DeclareInputText{133}{\"O}
\DeclareInputText{134}{\"U}
\DeclareInputText{135}{\@tabacckludge'a}
\DeclareInputText{136}{\@tabacckludge`a}
\DeclareInputText{137}{\^a}
\DeclareInputText{138}{\"a}
\DeclareInputText{139}{\~a}
\DeclareInputText{140}{\r a}
\DeclareInputText{141}{\c c}
\DeclareInputText{142}{\@tabacckludge'e}
\DeclareInputText{143}{\@tabacckludge`e}
\DeclareInputText{144}{\^e}
\DeclareInputText{145}{\"e}
\DeclareInputText{146}{\@tabacckludge'\i}
\DeclareInputText{147}{\@tabacckludge`\i}
\DeclareInputText{148}{\^\i}
\DeclareInputText{149}{\"\i}
\DeclareInputText{150}{\~n}
\DeclareInputText{151}{\@tabacckludge'o}
\DeclareInputText{152}{\@tabacckludge`o}
\DeclareInputText{153}{\^o}
\DeclareInputText{154}{\"o}
\DeclareInputText{155}{\~o}
\DeclareInputText{156}{\@tabacckludge'u}
\DeclareInputText{157}{\@tabacckludge`u}
\DeclareInputText{158}{\^u}
\DeclareInputText{159}{\"u}

\DeclareInputText{160}{\dag}
\DeclareInputText{161}{\textdegree}
\DeclareInputText{162}{\textcent}
\DeclareInputText{163}{\pounds}
\DeclareInputText{164}{\S}
\DeclareInputText{165}{\textbullet}
\DeclareInputText{166}{\P}
\DeclareInputText{167}{\ss}
\DeclareInputText{168}{\textregistered}
\DeclareInputText{169}{\copyright}
\DeclareInputText{170}{\texttrademark}
\DeclareInputText{171}{\@tabacckludge'{}}
\DeclareInputText{172}{\"{}}
\DeclareInputMath{173}{\neq}
\DeclareInputText{174}{\AE}
\DeclareInputText{175}{\O}
```

```
\DeclareInputMath{176}{\infty}
\DeclareInputMath{177}{\pm}
\DeclareInputMath{178}{\leq}
\DeclareInputMath{179}{\geq}
\DeclareInputText{180}{\textyen}
\DeclareInputMath{181}{\mu}
\DeclareInputMath{182}{\partial}
\DeclareInputMath{183}{\Sigma}
\DeclareInputMath{184}{\Pi}
\DeclareInputMath{185}{\pi}
\DeclareInputMath{186}{\int}
\DeclareInputText{187}{\textordfeminine}
\DeclareInputText{188}{\textordmasculine}
\DeclareInputMath{189}{\Omega}
\DeclareInputText{190}{\ae}
\DeclareInputText{191}{\o}

\DeclareInputText{192}{\textquestiondown}
\DeclareInputText{193}{\textexclamdown}
\DeclareInputMath{194}{\lnot}
\DeclareInputMath{195}{\surd}
\DeclareInputText{196}{\textflorin}
\DeclareInputMath{197}{\approx}
\DeclareInputMath{198}{\Delta}
\DeclareInputText{199}{\guillemetleft}
\DeclareInputText{200}{\guillemetright}
\DeclareInputText{201}{\dots}
\DeclareInputText{202}{\nobreakspace}
\DeclareInputText{203}{\@tabacckludge`A}
\DeclareInputText{204}{\~A}
\DeclareInputText{205}{\~O}
\DeclareInputText{206}{\OE}
\DeclareInputText{207}{\oe}
\DeclareInputText{208}{\textendash}
\DeclareInputText{209}{\textemdash}
\DeclareInputText{210}{\textquotedblleft}
\DeclareInputText{211}{\textquotedblright}
\DeclareInputText{212}{\textquoteleft}
\DeclareInputText{213}{\textquoteright}
\DeclareInputMath{214}{\div}
\DeclareInputMath{215}{\diamond}
\DeclareInputText{216}{\"y}
\DeclareInputText{217}{\"Y}
\DeclareInputMath{218}{/}
\DeclareInputText{219}{\textcurrency}
\DeclareInputText{220}{\guilsinglleft}
\DeclareInputText{221}{\guilsinglright}
\DeclareInputText{222}{fi}
\DeclareInputText{223}{fl}

\DeclareInputText{224}{\ddag}
\DeclareInputText{225}{\textperiodcentered}
\DeclareInputText{226}{\quotesinglbase}
\DeclareInputText{227}{\quotedblbase}
\DeclareInputText{228}{\textperthousand}
```

```
\DeclareInputText{229}{\^A}
\DeclareInputText{230}{\^E}
\DeclareInputText{231}{\@tabacckludge'A}
\DeclareInputText{232}{\"E}
\DeclareInputText{233}{\@tabacckludge`E}
\DeclareInputText{234}{\@tabacckludge'I}
\DeclareInputText{235}{\^I}
\DeclareInputText{236}{\"I}
\DeclareInputText{237}{\@tabacckludge`I}
\DeclareInputText{238}{\@tabacckludge'O}
\DeclareInputText{239}{\^O}
\DeclareInputText{240}{\textapplelogo}
\DeclareInputText{241}{\@tabacckludge`O}
\DeclareInputText{242}{\@tabacckludge'U}
\DeclareInputText{243}{\^U}
\DeclareInputText{244}{\@tabacckludge`U}
\DeclareInputText{245}{\i}
\DeclareInputText{246}{\^{}}
\DeclareInputText{247}{\~{}}
\DeclareInputText{248}{\@tabacckludge={}}
\DeclareInputText{249}{\u{}}
\DeclareInputText{250}{\.{}}
\DeclareInputText{251}{\r{}}
\DeclareInputText{252}{\c\ }
\DeclareInputText{253}{\H{}}
\DeclareInputText{254}{\k\ }
\DeclareInputText{255}{\v{}}
⟨/applemac⟩
```

This input encoding for the Apple Central European code page was contributed by Radek Tryc and Marcin Woliński <wolinski@mimuw.edu.pl>.

```
⟨*applemacce⟩
\DeclareInputText{128}{\"A}
\DeclareInputText{131}{\@tabacckludge'E}
\DeclareInputText{132}{\k A}
\DeclareInputText{133}{\"O}
\DeclareInputText{134}{\"U}
\DeclareInputText{136}{\k a}
\DeclareInputText{137}{\v C}
\DeclareInputText{138}{\"a}
\DeclareInputText{139}{\v c}
\DeclareInputText{140}{\@tabacckludge'C}
\DeclareInputText{141}{\@tabacckludge'c}
\DeclareInputText{143}{\@tabacckludge'Z}
\DeclareInputText{144}{\@tabacckludge'z}
\DeclareInputText{151}{\@tabacckludge'o}
\DeclareInputText{159}{\"u}
\DeclareInputText{154}{\"o}
\DeclareInputText{133}{\"O}
\DeclareInputText{134}{\"U}
\DeclareInputText{153}{\^o}
\DeclareInputText{160}{\dag}
\DeclareInputText{161}{\textdegree}
\DeclareInputText{162}{\k E}
```

```
\DeclareInputText{163}{\pounds}
\DeclareInputText{164}{\S}
\DeclareInputText{165}{\textbullet}
\DeclareInputText{166}{\P}
\DeclareInputText{167}{\ss}
\DeclareInputText{168}{\textregistered}
\DeclareInputText{171}{\k e}
\DeclareInputText{193}{\@tabacckludge'N}
\DeclareInputText{169}{\copyright}
\DeclareInputText{184}{\l}
\DeclareInputText{196}{\@tabacckludge'n}
\DeclareInputText{199}{\guillemetleft}
\DeclareInputText{200}{\guillemetright}
\DeclareInputText{201}{\dots}
\DeclareInputText{202}{\nobreakspace}
\DeclareInputText{208}{\textendash}
\DeclareInputText{209}{\textemdash}
\DeclareInputText{210}{\textquotedblleft}
\DeclareInputText{211}{\textquotedblright}
\DeclareInputText{212}{\textquoteleft}
\DeclareInputText{213}{\textquoteright}
\DeclareInputText{214}{\textdiv}
\DeclareInputText{220}{\guilsinglleft}
\DeclareInputText{221}{\guilsinglright}
\DeclareInputText{222}{\v r}
\DeclareInputText{226}{\quotesinglbase}
\DeclareInputText{227}{\quotedblbase}
\DeclareInputText{229}{\@tabacckludge'S}
\DeclareInputText{230}{\@tabacckludge's}
\DeclareInputText{238}{\@tabacckludge'O}
\DeclareInputText{239}{\^O}
\DeclareInputText{251}{\.Z}
\DeclareInputText{252}{\L}
\DeclareInputText{253}{\.z}
⟨/applemacce⟩
```

15 The Next encoding

This input encoding is based on work by Stefan Ried (`stef@theo-phys.uni-essen.de`) and Holger Uhr (`huhr@uni-paderborn.de`).

Further extended by Jens Heise (`heisbeee@calvados.zrz.TU-Berlin.DE`).

```
⟨*next⟩
\DeclareInputText{128}{\nobreakspace}
\DeclareInputText{129}{\@tabacckludge`A}
\DeclareInputText{130}{\@tabacckludge'A}
\DeclareInputText{131}{\^A}
\DeclareInputText{132}{\~A}
\DeclareInputText{133}{\"A}
\DeclareInputText{134}{\r A}
\DeclareInputText{135}{\c C}
\DeclareInputText{136}{\@tabacckludge`E}
\DeclareInputText{137}{\@tabacckludge'E}
```

```
\DeclareInputText{138}{\^E}
\DeclareInputText{139}{\"E}
\DeclareInputText{140}{\@tabacckludge`I}
\DeclareInputText{141}{\@tabacckludge'I}
\DeclareInputText{142}{\^I}
\DeclareInputText{143}{\"I}
\DeclareInputText{144}{\DH}
\DeclareInputText{145}{\~N}
\DeclareInputText{146}{\@tabacckludge`O}
\DeclareInputText{147}{\@tabacckludge'O}
\DeclareInputText{148}{\^O}
\DeclareInputText{149}{\~O}
\DeclareInputText{150}{\"O}
\DeclareInputText{151}{\@tabacckludge`U}
\DeclareInputText{152}{\@tabacckludge'U}
\DeclareInputText{153}{\^U}
\DeclareInputText{154}{\"U}
\DeclareInputText{155}{\@tabacckludge'Y}
\DeclareInputText{156}{\TH}
\DeclareInputMath{157}{\mu}
\DeclareInputMath{158}{\times}
\DeclareInputMath{159}{\div}

\DeclareInputText{160}{\copyright}
\DeclareInputText{161}{\textexclamdown}
\DeclareInputText{162}{\textcent}
\DeclareInputText{163}{\pounds}
\DeclareInputMath{164}{/}
\DeclareInputText{165}{\textyen}
\DeclareInputText{166}{\textflorin}
\DeclareInputText{167}{\S}
\DeclareInputText{168}{\textcurrency}
\DeclareInputText{169}{\textquoteright}
\DeclareInputText{170}{\textquotedblleft}
\DeclareInputText{171}{\guillemetleft}
\DeclareInputText{172}{\guilsinglleft}
\DeclareInputText{173}{\guilsinglright}
\DeclareInputText{174}{fi}
\DeclareInputText{175}{fl}
\DeclareInputText{176}{\textregistered}
\DeclareInputText{177}{\textendash}
\DeclareInputText{178}{\dag}
\DeclareInputText{179}{\ddag}
\DeclareInputText{180}{\textperiodcentered}
\DeclareInputText{181}{\textbrokenbar}
\DeclareInputText{182}{\P}
\DeclareInputText{183}{\textbullet}
\DeclareInputText{184}{\quotesinglbase}
\DeclareInputText{185}{\quotedblbase}
\DeclareInputText{186}{\textquotedblright}
\DeclareInputText{187}{\guillemetright}
\DeclareInputText{188}{\dots}
\DeclareInputText{189}{\textperthousand}
\DeclareInputMath{190}{\lnot}
\DeclareInputText{191}{\textquestiondown}
```

```
\DeclareInputMath{192}{\mathonesuperior}
\DeclareInputText{193}{\@tabacckludge‘{}}
\DeclareInputText{194}{\@tabacckludge’{}}
\DeclareInputText{195}{\^{}}
\DeclareInputText{196}{\~{}}
\DeclareInputText{197}{\@tabacckludge={}}
\DeclareInputText{198}{\u{}}
\DeclareInputText{199}{\.{}}
\DeclareInputText{200}{\"{}}
\DeclareInputMath{201}{\mathtwosuperior}
\DeclareInputText{202}{\r{}}
\DeclareInputText{203}{\c\ }
\DeclareInputMath{204}{\maththreesuperior}
\DeclareInputText{205}{\H{}}
\DeclareInputText{206}{\k\ }
\DeclareInputText{207}{\v{}}
\DeclareInputText{208}{\textemdash}
\DeclareInputMath{209}{\pm}
\DeclareInputText{210}{\textonequarter}
\DeclareInputText{211}{\textonehalf}
\DeclareInputText{212}{\textthreequarters}
\DeclareInputText{213}{\@tabacckludge‘a}
\DeclareInputText{214}{\@tabacckludge’a}
\DeclareInputText{215}{\^a}
\DeclareInputText{216}{\~a}
\DeclareInputText{217}{\"a}
\DeclareInputText{218}{\r a}
\DeclareInputText{219}{\c c}
\DeclareInputText{220}{\@tabacckludge‘e}
\DeclareInputText{221}{\@tabacckludge’e}
\DeclareInputText{222}{\^e}
\DeclareInputText{223}{\"e}

\DeclareInputText{224}{\@tabacckludge‘\i}
\DeclareInputText{225}{\AE}
\DeclareInputText{226}{\@tabacckludge’\i}
\DeclareInputText{227}{\textordfeminine}
\DeclareInputText{228}{\^\i}
\DeclareInputText{229}{\"\i}
\DeclareInputText{230}{\dh}
\DeclareInputText{231}{\~n}
\DeclareInputText{232}{\L}
\DeclareInputText{233}{\O}
\DeclareInputText{234}{\OE}
\DeclareInputText{235}{\textordmasculine}
\DeclareInputText{236}{\@tabacckludge‘o}
\DeclareInputText{237}{\@tabacckludge’o}
\DeclareInputText{238}{\^o}
\DeclareInputText{239}{\~o}
\DeclareInputText{240}{\"o}
\DeclareInputText{241}{\ae}
\DeclareInputText{242}{\@tabacckludge‘u}
\DeclareInputText{243}{\@tabacckludge’u}
\DeclareInputText{244}{\^u}
\DeclareInputText{245}{\i}
```

```
\DeclareInputText{246}{\"u}
\DeclareInputText{247}{\@tabacckludge'y}
\DeclareInputText{248}{\l}
\DeclareInputText{249}{\o}
\DeclareInputText{250}{\oe}
\DeclareInputText{251}{\ss}
\DeclareInputText{252}{\th}
\DeclareInputText{253}{\"y}
⟨/next⟩
```

16 The MS Windows ANSI encoding cp1252, and the ISO Latin-1 and Latin-9 encodings

The MS Windows ANSI, cp 1252, input encoding was contributed by Berthold K.P. Horn (bkph@ai.mit.edu).

It has two very different names so the same code produces two files. These encoding files both define the characters in the MS Windows 3.1 ANSI encoding (Western Europe), also known as code page 1252, which is based on ISO Latin-1 but has important additions in the 128–159 range.

Designed for: Danish, Dutch, English, Finnish, French, German, Icelandic, Italian, Norwegian, Portuguese, Spanish, and Swedish.

Note: Windows ANSI — like Macintosh standard Roman encoding — has quotesingle at 39, and grave at 96 — which is here ignored.

The ISO Latin-1 encoding file defines only the restricted range of characters available in the ISO 8859-1 encoding.

The ISO Latin-9 encoding file defines the characters in the ISO 8859-15 encoding. It was contributed by Karsten Tinnefeld (karsten@tinnefeld.com). It differs only a small amount from ISO Latin-1 and is a replacement for it that contains a few characters that are needed for French and Finnish. Further, a slot for the Euro currency sign has been added and this could be the killer argument for many 8-bit texts to be written in Latin-9 in the future.

According to a Linux man page, ISO Latin-9 supports Albanian, Basque, Breton, Catalan, Danish, Dutch, English, Estonian, Faroese, Finnish, French, Frisian, Galician, German, Greenlandic, Icelandic, Irish Gaelic, Italian, Latin, Luxemburgish, Norwegian, Portuguese, Rhaeto-Romanic, Scottish Gaelic, Spanish and Swedish.

The characters added in latin9.def are (in LaTeX notation):

```
\texteuro, \v S   \v s   \v Z   \v z   \OE   \oe   \" Y
```

They displace the following characters from latin1.def:

```
\textcurrency   \textbrokenbar   \"{}   \'{}   \c{}
\textonequarter   \textonehalf   \textthreequarters
```

```
⟨*cp1252⟩
\DeclareInputText{128}{\texteuro}
\DeclareInputText{130}{\quotesinglbase}
\DeclareInputText{131}{\textflorin}
\DeclareInputText{132}{\quotedblbase}
```

```
\DeclareInputText{133}{\dots}
\DeclareInputText{134}{\dag}
\DeclareInputText{135}{\ddag}
\DeclareInputText{136}{\^{}}
\DeclareInputText{137}{\textperthousand}
\DeclareInputText{138}{\v S}
\DeclareInputText{139}{\guilsinglleft}
\DeclareInputText{140}{\OE}
\DeclareInputText{142}{\v Z}
\DeclareInputText{145}{\textquoteleft}
\DeclareInputText{146}{\textquoteright}
\DeclareInputText{147}{\textquotedblleft}
\DeclareInputText{148}{\textquotedblright}
\DeclareInputText{149}{\textbullet}
\DeclareInputText{150}{\textendash}
\DeclareInputText{151}{\textemdash}
\DeclareInputText{152}{\~{}}
\DeclareInputText{153}{\texttrademark}
\DeclareInputText{154}{\v s}
\DeclareInputText{155}{\guilsinglright}
\DeclareInputText{156}{\oe}
\DeclareInputText{158}{\v z}
\DeclareInputText{159}{\"Y}
⟨/cp1252⟩
```

This (somewhat confused) table is now even more disordered: first we deal with those few characters that are different in latin9, then with the rest.

```
⟨*cp1252 | latin1⟩
\DeclareInputText{164}{\textcurrency}
\DeclareInputText{166}{\textbrokenbar}
\DeclareInputText{168}{\"{}}
\DeclareInputText{180}{\@tabacckludge'{}}
\DeclareInputText{184}{\c\ }
\DeclareInputText{188}{\textonequarter}
\DeclareInputText{189}{\textonehalf}
\DeclareInputText{190}{\textthreequarters}
⟨/cp1252 | latin1⟩
```

```
⟨*latin9⟩
\DeclareInputText{164}{\texteuro}
\DeclareInputText{166}{\v S}
\DeclareInputText{168}{\v s}
\DeclareInputText{180}{\v Z}
\DeclareInputText{184}{\v z}
\DeclareInputText{188}{\OE}
\DeclareInputText{189}{\oe}
\DeclareInputText{190}{\"Y}
⟨/latin9⟩
```

```
⟨*cp1252 | latin1 | latin9⟩
\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{176}{\textdegree}
\DeclareInputText{161}{\textexclamdown}
\DeclareInputMath{177}{\pm}
\DeclareInputText{162}{\textcent}
```

```
\DeclareInputMath{178}{\mathtwosuperior}
\DeclareInputText{163}{\pounds}
\DeclareInputMath{179}{\maththreesuperior}
\DeclareInputText{165}{\textyen}
\DeclareInputMath{181}{\mu}
\DeclareInputText{182}{\P}
\DeclareInputText{167}{\S}
\DeclareInputText{183}{\textperiodcentered}
\DeclareInputText{169}{\copyright}
\DeclareInputMath{185}{\mathonesuperior}
\DeclareInputText{170}{\textordfeminine}
\DeclareInputText{186}{\textordmasculine}
\DeclareInputText{171}{\guillemetleft}
\DeclareInputText{187}{\guillemetright}
\DeclareInputMath{172}{\lnot}
\DeclareInputText{173}{\-}
\DeclareInputText{174}{\textregistered}
\DeclareInputText{175}{\@tabacckludge={}}
\DeclareInputText{191}{\textquestiondown}
\DeclareInputText{192}{\@tabacckludge`A}
\DeclareInputText{208}{\DH}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{209}{\~N}
\DeclareInputText{194}{\^A}
\DeclareInputText{210}{\@tabacckludge`O}
\DeclareInputText{195}{\~A}
\DeclareInputText{211}{\@tabacckludge'O}
\DeclareInputText{196}{\"A}
\DeclareInputText{212}{\^O}
\DeclareInputText{197}{\r A}
\DeclareInputText{213}{\~O}
\DeclareInputText{198}{\AE}
\DeclareInputText{214}{\"O}
\DeclareInputText{199}{\c C}
\DeclareInputMath{215}{\times}
\DeclareInputText{200}{\@tabacckludge`E}
\DeclareInputText{216}{\O}
\DeclareInputText{201}{\@tabacckludge'E}
\DeclareInputText{217}{\@tabacckludge`U}
\DeclareInputText{202}{\^E}
\DeclareInputText{218}{\@tabacckludge'U}
\DeclareInputText{203}{\"E}
\DeclareInputText{219}{\^U}
\DeclareInputText{204}{\@tabacckludge`I}
\DeclareInputText{220}{\"U}
\DeclareInputText{205}{\@tabacckludge'I}
\DeclareInputText{221}{\@tabacckludge'Y}
\DeclareInputText{206}{\^I}
\DeclareInputText{222}{\TH}
\DeclareInputText{207}{\"I}
\DeclareInputText{223}{\ss}
\DeclareInputText{224}{\@tabacckludge`a}
\DeclareInputText{240}{\dh}
```

```
\DeclareInputText{225}{\@tabacckludge'a}
\DeclareInputText{241}{\~n}
\DeclareInputText{226}{\^a}
\DeclareInputText{242}{\@tabacckludge`o}
\DeclareInputText{227}{\~a}
\DeclareInputText{243}{\@tabacckludge'o}
\DeclareInputText{228}{\"a}
\DeclareInputText{244}{\^o}
\DeclareInputText{229}{\r a}
\DeclareInputText{245}{\~o}
\DeclareInputText{230}{\ae}
\DeclareInputText{246}{\"o}
\DeclareInputText{231}{\c c}
\DeclareInputMath{247}{\div}
\DeclareInputText{232}{\@tabacckludge`e}
\DeclareInputText{248}{\o}
\DeclareInputText{233}{\@tabacckludge'e}
\DeclareInputText{249}{\@tabacckludge`u}
\DeclareInputText{234}{\^e}
\DeclareInputText{250}{\@tabacckludge'u}
\DeclareInputText{235}{\"e}
\DeclareInputText{251}{\^u}
\DeclareInputText{236}{\@tabacckludge`\i}
\DeclareInputText{252}{\"u}
\DeclareInputText{237}{\@tabacckludge'\i}
\DeclareInputText{253}{\@tabacckludge'y}
\DeclareInputText{238}{\^\i}
\DeclareInputText{254}{\th}
\DeclareInputText{239}{\"\i}
\DeclareInputText{255}{\"y}
⟨/cp1252 | latin1 | latin9⟩
```

17 The ISO 8859-16 (Latin10) encoding

This set of coded graphic characters is intended for use in data and text processing applications and also for information interchange. The set contains graphic characters used for general purpose applications in typical office environments in at least the following languages: Albanian, Croatian, English, Finnish, French, German, Hungarian, Irish Gaelic (new orthography), Italian, Latin, Polish, Romanian, and Slovenian. This set of coded graphic characters may be regarded as a version of an 8-bit code according to ISO/IEC 2022 or ISO/IEC 4873 at level 1. [ISO 8859-16:2001(E), p. 1]

ISO 8859-16 was primarily designed for single-byte encoding the Romanian language. The UTF-8 charset is the preferred and in today's MIME software more widely implemented encoding suitable for Romanian.

Data for the LaTeX support was mainly provided by Ionel Ciobîcă with additions and corrections taken from
`https://www.unicode.org/Public/MAPPINGS/ISO8859/8859-16.TXT`.

```
⟨*latin10⟩
```

The "comma below" accent is provided here in a crude (better than nothing) version.

```
\ProvideTextCommandDefault\textcommabelow[1]
  {\hmode@bgroup\ooalign{\null#1\crcr\hidewidth
     \raise-.31ex\hbox{\check@mathfonts
```

Use `\sf@size` instead of `\ssf@size` if the comma looks too small:

```
                        \fontsize\ssf@size\z@
                        \math@fontsfalse\selectfont,}\hidewidth}\egroup}
\ProvideTextCommandDefault\textpm{\ensuremath\pm}
```

But why only for this one encoding? (Answer: because it is a new encoding: it contains only LICR objects — Frank)

```
\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{161}{\k A}
\DeclareInputText{162}{\k a}
\DeclareInputText{163}{\L}
\DeclareInputText{164}{\texteuro}
\DeclareInputText{165}{\quotedblbase}
\DeclareInputText{166}{\v S}
\DeclareInputText{167}{\S}
\DeclareInputText{168}{\v s}
\DeclareInputText{169}{\textcopyright}
\DeclareInputText{170}{\textcommabelow S}
\DeclareInputText{171}{\guillemetleft}
\DeclareInputText{172}{\@tabacckludge'Z}
\DeclareInputText{173}{\-}
\DeclareInputText{174}{\@tabacckludge'z}
\DeclareInputText{175}{\.Z}
\DeclareInputText{176}{\textdegree}
\DeclareInputText{177}{\textpm}
\DeclareInputText{178}{\v C}
\DeclareInputText{179}{\l}
\DeclareInputText{180}{\v Z}
\DeclareInputText{181}{\textquotedblright}
\DeclareInputText{182}{\P}
\DeclareInputText{183}{\textperiodcentered}
\DeclareInputText{184}{\v z}
\DeclareInputText{185}{\v c}
\DeclareInputText{186}{\textcommabelow s}
\DeclareInputText{187}{\guillemetright}
\DeclareInputText{188}{\OE}
\DeclareInputText{189}{\oe}
\DeclareInputText{190}{\"Y}
\DeclareInputText{191}{\.z}
\DeclareInputText{192}{\@tabacckludge`A}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{194}{\^A}
\DeclareInputText{195}{\u A}
\DeclareInputText{196}{\"A}
\DeclareInputText{197}{\@tabacckludge'C}
\DeclareInputText{198}{\AE}
\DeclareInputText{199}{\c C}
\DeclareInputText{200}{\@tabacckludge`E}
\DeclareInputText{201}{\@tabacckludge'E}
\DeclareInputText{202}{\^E}
```

```
\DeclareInputText{203}{\"E}
\DeclareInputText{204}{\@tabacckludge‘I}
\DeclareInputText{205}{\@tabacckludge’I}
\DeclareInputText{206}{\^I}
\DeclareInputText{207}{\"I}
\DeclareInputText{208}{\DJ}
\DeclareInputText{209}{\@tabacckludge’N}
\DeclareInputText{210}{\@tabacckludge‘O}
\DeclareInputText{211}{\@tabacckludge’O}
\DeclareInputText{212}{\^O}
\DeclareInputText{213}{\H O}
\DeclareInputText{214}{\"O}
\DeclareInputText{215}{\@tabacckludge’S}
\DeclareInputText{216}{\H U}
\DeclareInputText{217}{\@tabacckludge‘U}
\DeclareInputText{218}{\@tabacckludge’U}
\DeclareInputText{219}{\^U}
\DeclareInputText{220}{\"U}
\DeclareInputText{221}{\k E}
\DeclareInputText{222}{\textcommabelow T}
\DeclareInputText{223}{\ss}
\DeclareInputText{224}{\@tabacckludge‘a}
\DeclareInputText{225}{\@tabacckludge’a}
\DeclareInputText{226}{\^a}
\DeclareInputText{227}{\u a}
\DeclareInputText{228}{\"a}
\DeclareInputText{229}{\@tabacckludge’c}
\DeclareInputText{230}{\ae}
\DeclareInputText{231}{\c c}
\DeclareInputText{232}{\@tabacckludge‘e}
\DeclareInputText{233}{\@tabacckludge’e}
\DeclareInputText{234}{\^e}
\DeclareInputText{235}{\"e}
\DeclareInputText{236}{\@tabacckludge‘\i}
\DeclareInputText{237}{\@tabacckludge’\i}
\DeclareInputText{238}{\^\i}
\DeclareInputText{239}{\"\i}
\DeclareInputText{240}{\dj}
\DeclareInputText{241}{\@tabacckludge’n}
\DeclareInputText{242}{\@tabacckludge‘o}
\DeclareInputText{243}{\@tabacckludge’o}
\DeclareInputText{244}{\^o}
\DeclareInputText{245}{\H o}
\DeclareInputText{246}{\"o}
\DeclareInputText{247}{\@tabacckludge’s}
\DeclareInputText{248}{\H u}
\DeclareInputText{249}{\@tabacckludge‘u}
\DeclareInputText{250}{\@tabacckludge’u}
\DeclareInputText{251}{\^u}
\DeclareInputText{252}{\"u}
\DeclareInputText{253}{\k e}
\DeclareInputText{254}{\textcommabelow t}
\DeclareInputText{255}{\"y}
```
⟨/latin10⟩

18 The MS Windows encoding cp1250

This is an MS Windows encoding for Central and Eastern Europe, known as Code Page 1250; it was provided by Marcin Woliński `wolinski@melkor.mimuw.edu.pl` and edited by Chris Rowley (see v0.94 below) to make it consistent with other files.

```
⟨*cp1250⟩
\DeclareInputText{128}{\texteuro}
%\DeclareInputText{129}{} % n/u
\DeclareInputText{130}{\quotesinglbase}
%\DeclareInputText{131}{} % n/u
\DeclareInputText{132}{\quotedblbase}
\DeclareInputText{133}{\dots}
\DeclareInputText{134}{\dag}
\DeclareInputText{135}{\ddag}
%\DeclareInputText{136}{} % n/u
\DeclareInputText{137}{\textperthousand}
\DeclareInputText{138}{\v S}
\DeclareInputText{139}{\guilsinglleft}
\DeclareInputText{140}{\@tabacckludge'S}
\DeclareInputText{141}{\v T}
\DeclareInputText{142}{\v Z}
\DeclareInputText{143}{\@tabacckludge'Z}
%\DeclareInputText{144}{} % n/u
\DeclareInputText{145}{\textquoteleft}
\DeclareInputText{146}{\textquoteright}
\DeclareInputText{147}{\textquotedblleft}
\DeclareInputText{148}{\textquotedblright}
\DeclareInputText{149}{\textbullet}
\DeclareInputText{150}{\textendash}
\DeclareInputText{151}{\textemdash}
%\DeclareInputText{152}{} % n/u
\DeclareInputText{153}{\texttrademark}
\DeclareInputText{154}{\v s}
\DeclareInputText{155}{\guilsinglright}
\DeclareInputText{156}{\@tabacckludge's}
\DeclareInputText{157}{\v t} % t caron (t') ?
\DeclareInputText{158}{\v z}
\DeclareInputText{159}{\@tabacckludge'z}

\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{161}{\v{}}
\DeclareInputText{162}{\u{}}
\DeclareInputText{163}{\L}
\DeclareInputText{164}{\textcurrency}
\DeclareInputText{165}{\k A}
\DeclareInputText{166}{\textbrokenbar}
\DeclareInputText{167}{\S}
\DeclareInputText{168}{\"{}}
\DeclareInputText{169}{\copyright}
\DeclareInputText{170}{\c S}
\DeclareInputText{171}{\guillemetleft}
\DeclareInputMath{172}{\lnot}
\DeclareInputText{173}{\-}% soft hyphen
```

```
\DeclareInputText{174}{\textregistered}
\DeclareInputText{175}{\.Z}
\DeclareInputText{176}{\textdegree}
\DeclareInputMath{177}{\pm}% plus-minus
\DeclareInputText{178}{\k\ }
\DeclareInputText{179}{\l}
\DeclareInputText{180}{\@tabacckludge'{}}
\DeclareInputMath{181}{\mu}% micro sign
\DeclareInputText{182}{\P}
\DeclareInputText{183}{\textperiodcentered}
\DeclareInputText{184}{\c\ }
\DeclareInputText{185}{\k a}
\DeclareInputText{186}{\c s}
\DeclareInputText{187}{\guillemetright}
\DeclareInputText{188}{\v L}% L caron (L') ?
\DeclareInputText{189}{\H{}}
\DeclareInputText{190}{\v l}% l caron (l') ?
\DeclareInputText{191}{\.z}

\DeclareInputText{192}{\@tabacckludge'R}
\DeclareInputText{193}{\@tabacckludge'A}
\DeclareInputText{194}{\^A}
\DeclareInputText{195}{\u A}
\DeclareInputText{196}{\"A}
\DeclareInputText{197}{\@tabacckludge'L}
\DeclareInputText{198}{\@tabacckludge'C}
\DeclareInputText{199}{\c C}
\DeclareInputText{200}{\v C}
\DeclareInputText{201}{\@tabacckludge'E}
\DeclareInputText{202}{\k E}
\DeclareInputText{203}{\"E}
\DeclareInputText{204}{\v E}
\DeclareInputText{205}{\@tabacckludge'I}
\DeclareInputText{206}{\^I}
\DeclareInputText{207}{\v D}
\DeclareInputText{208}{\DJ} % D stroke
\DeclareInputText{209}{\@tabacckludge'N}
\DeclareInputText{210}{\v N}
\DeclareInputText{211}{\@tabacckludge'O}
\DeclareInputText{212}{\^O}
\DeclareInputText{213}{\H O}
\DeclareInputText{214}{\"O}
\DeclareInputMath{215}{\times}
\DeclareInputText{216}{\v R}
\DeclareInputText{217}{\r U}
\DeclareInputText{218}{\@tabacckludge'U}
\DeclareInputText{219}{\H U}
\DeclareInputText{220}{\"U}
\DeclareInputText{221}{\@tabacckludge'Y}
\DeclareInputText{222}{\c T}
\DeclareInputText{223}{\ss}

\DeclareInputText{224}{\@tabacckludge'r}
\DeclareInputText{225}{\@tabacckludge'a}
\DeclareInputText{226}{\^a}
```

```
\DeclareInputText{227}{\u a}
\DeclareInputText{228}{\"a}
\DeclareInputText{229}{\@tabacckludge'l}
\DeclareInputText{230}{\@tabacckludge'c}
\DeclareInputText{231}{\c c}
\DeclareInputText{232}{\v c}
\DeclareInputText{233}{\@tabacckludge'e}
\DeclareInputText{234}{\k e}
\DeclareInputText{235}{\"e}
\DeclareInputText{236}{\v e}
\DeclareInputText{237}{\@tabacckludge'\i}
\DeclareInputText{238}{\^\i}
\DeclareInputText{239}{\v d} % d caron (d') ?
\DeclareInputText{240}{\dj} % d stroke
\DeclareInputText{241}{\@tabacckludge'n}
\DeclareInputText{242}{\v n}
\DeclareInputText{243}{\@tabacckludge'o}
\DeclareInputText{244}{\^o}
\DeclareInputText{245}{\H o}
\DeclareInputText{246}{\"o}
\DeclareInputMath{247}{\div}
\DeclareInputText{248}{\v r}
\DeclareInputText{249}{\r u}
\DeclareInputText{250}{\@tabacckludge'u}
\DeclareInputText{251}{\H u}
\DeclareInputText{252}{\"u}
\DeclareInputText{253}{\@tabacckludge'y}
\DeclareInputText{254}{\c t}
\DeclareInputText{255}{\.{}}
```
⟨/cp1250⟩

19 The MS Windows encoding cp1257

This is an MS Windows encoding for Baltic languages, known as Code Page 1257; provided by Heiko Oberdiek using the mappings to Unicode in
`https://www.unicode.org/Public/MAPPINGS/VENDORS/MICSFT/WINDOWS/CP1257.TXT`
and
`http://www.microsoft.com/globaldev/reference/sbcs/1257.mspx`.

⟨*cp1257⟩
```
\DeclareInputText{128}{\texteuro}
\DeclareInputText{130}{\quotesinglbase}
\DeclareInputText{132}{\quotedblbase}
\DeclareInputText{133}{\dots}
\DeclareInputText{134}{\dag}
\DeclareInputText{135}{\ddag}
\DeclareInputText{137}{\textperthousand}
\DeclareInputText{139}{\guilsinglleft}
\DeclareInputText{141}{\"{}}
\DeclareInputText{142}{\v{}}
\DeclareInputText{143}{\c\ }
\DeclareInputText{145}{\textquoteleft}
```

```
\DeclareInputText{146}{\textquoteright}
\DeclareInputText{147}{\textquotedblleft}
\DeclareInputText{148}{\textquotedblright}
\DeclareInputText{149}{\textbullet}
\DeclareInputText{150}{\textendash}
\DeclareInputText{151}{\textemdash}
\DeclareInputText{153}{\texttrademark}
\DeclareInputText{155}{\guilsinglright}
\DeclareInputText{157}{\@tabacckludge={}}
\DeclareInputText{158}{\k\ }

\DeclareInputText{160}{\nobreakspace}
\DeclareInputText{162}{\textcent}
\DeclareInputText{163}{\pounds}
\DeclareInputText{164}{\textcurrency}
\DeclareInputText{166}{\textbrokenbar}
\DeclareInputText{167}{\S}
\DeclareInputText{168}{\O}
\DeclareInputText{169}{\copyright}
\DeclareInputText{170}{\c R}
\DeclareInputText{171}{\guillemetleft}
\DeclareInputMath{172}{\lnot}
\DeclareInputText{173}{\-}
\DeclareInputText{174}{\textregistered}
\DeclareInputText{175}{\AE}
\DeclareInputText{176}{\textdegree}
\DeclareInputMath{177}{\pm}
\DeclareInputMath{178}{\mathtwosuperior}
\DeclareInputMath{179}{\maththreesuperior}
\DeclareInputText{180}{\@tabacckludge'{}}
\DeclareInputMath{181}{\mu}
\DeclareInputText{182}{\P}
\DeclareInputText{183}{\textperiodcentered}
\DeclareInputText{184}{\o}
\DeclareInputMath{185}{\mathonesuperior}
\DeclareInputText{186}{\c r}
\DeclareInputText{187}{\guillemetright}
\DeclareInputText{188}{\textonequarter}
\DeclareInputText{189}{\textonehalf}
\DeclareInputText{190}{\textthreequarters}
\DeclareInputText{191}{\ae}

\DeclareInputText{192}{\k A}
\DeclareInputText{193}{\k I}
\DeclareInputText{194}{\@tabacckludge=A}
\DeclareInputText{195}{\@tabacckludge'C}
\DeclareInputText{196}{\"A}
\DeclareInputText{197}{\r A}
\DeclareInputText{198}{\k E}
\DeclareInputText{199}{\@tabacckludge=E}
\DeclareInputText{200}{\v C}
\DeclareInputText{201}{\@tabacckludge'E}
\DeclareInputText{202}{\@tabacckludge'Z}
\DeclareInputText{203}{\.{E}}
\DeclareInputText{204}{\c G}
```

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\DeclareInputText{205}{\c K}
\DeclareInputText{206}{\@tabacckludge=I}
\DeclareInputText{207}{\c L}
\DeclareInputText{208}{\v S}
\DeclareInputText{209}{\@tabacckludge'N}
\DeclareInputText{210}{\c N}
\DeclareInputText{211}{\@tabacckludge'O}
\DeclareInputText{212}{\@tabacckludge=O}
\DeclareInputText{213}{\~O}
\DeclareInputText{214}{\"O}
\DeclareInputMath{215}{\times}
\DeclareInputText{216}{\k U}
\DeclareInputText{217}{\L}
\DeclareInputText{218}{\@tabacckludge'S}
\DeclareInputText{219}{\@tabacckludge=U}
\DeclareInputText{220}{\"U}
\DeclareInputText{221}{\.Z}
\DeclareInputText{222}{\v Z}
\DeclareInputText{223}{\ss}
\DeclareInputText{224}{\k a}
\DeclareInputText{225}{\k i}
\DeclareInputText{226}{\@tabacckludge=a}
\DeclareInputText{227}{\@tabacckludge'c}
\DeclareInputText{228}{\"a}
\DeclareInputText{229}{\r a}
\DeclareInputText{230}{\k e}
\DeclareInputText{231}{\@tabacckludge=e}
\DeclareInputText{232}{\v c}
\DeclareInputText{233}{\@tabacckludge'e}
\DeclareInputText{234}{\@tabacckludge'z}
\DeclareInputText{235}{\.{e}}
\DeclareInputText{236}{\c g}
\DeclareInputText{237}{\c k}
\DeclareInputText{238}{\@tabacckludge=\i}
\DeclareInputText{239}{\c l}
\DeclareInputText{240}{\v s}
\DeclareInputText{241}{\@tabacckludge'n}
\DeclareInputText{242}{\c n}
\DeclareInputText{243}{\@tabacckludge'o}
\DeclareInputText{244}{\@tabacckludge=o}
\DeclareInputText{245}{\~o}
\DeclareInputText{246}{\"o}
\DeclareInputMath{247}{\div}
\DeclareInputText{248}{\k u}
\DeclareInputText{249}{\l}
\DeclareInputText{250}{\@tabacckludge's}
\DeclareInputText{251}{\@tabacckludge=u}
\DeclareInputText{252}{\"u}
\DeclareInputText{253}{\.z}
\DeclareInputText{254}{\v z}
\DeclareInputText{255}{\.{}}
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```