

# CronosPro Support for L<sup>A</sup>T<sub>E</sub>X

Sebastian Schubert

vo.2b – 2017/04/11

## Contents

<b>1</b>	<b>Overview</b>	<b>2</b>
<b>2</b>	<b>Interference with other packages</b>	<b>2</b>
<b>3</b>	<b>Options</b>	<b>2</b>
<b>4</b>	<b>Figure selection</b>	<b>3</b>
<b>5</b>	<b>Additional font shapes and symbols</b>	<b>3</b>
<b>6</b>	<b>Language support</b>	<b>4</b>
<b>7</b>	<b>Searching for figures or for words containing ligatures in PDF documents</b>	<b>4</b>
<b>8</b>	<b>NFSS classification</b>	<b>5</b>
<b>9</b>	<b>Version history</b>	<b>5</b>
<b>10</b>	<b>The main style file</b>	<b>5</b>
10.1	Options . . . . .	5
10.2	Font declarations . . . . .	7
10.3	Font selection . . . . .	7
10.4	pdfT <sub>E</sub> X to-unicode support . . . . .	7
10.5	Superior and inferior figures . . . . .	10
10.6	Additional symbols . . . . .	12
10.7	Logos . . . . .	12
<b>11</b>	<b>Support for character protrusion</b>	<b>13</b>
<b>12</b>	<b>Font definition files</b>	<b>18</b>

## 1 Overview

The CronosPro package provides support for the CronosPro font family from Adobe. You can use these fonts in a  $\TeX$  document by adding the command

```
\usepackage{CronosPro}
```

to the preamble. This will change the sans serif text font only. If you want to use CronosPro as your main font, add

```
\renewcommand{\familydefault}{\sfdefault}
```

to your preamble.

### Acknowledgements

CronosPro is heavily based on the MinionPro package by Achim Blumensath, Andreas Bühmann and Michael Zedler.

## 2 Interference with other packages

The CronosPro package automatically loads the following packages: `textcomp` and `fontaxes`. If you want to pass options to these packages you can either put the corresponding `\usepackage` command before the `\usepackage{CronosPro}` or you can include the options in the `\documentclass` command.

The CronosPro package includes support files for the microtype package (version 1.8 or higher), consult the package's documentation for further details.

## 3 Options

### Font selection

The following options specify which version of the fonts you want to use. The default settings are marked with an asterisk\*.

<code>smallfamily*</code>	use only regular and bold face
<code>medfamily</code>	use semibold face in addition to <code>smallfamily</code>
<code>noopticals*</code>	use only the optical size Text
<code>opticals</code>	use the optical sizes Caption, Text, Subhead, and Display
<code>slides</code>	use only the optical size Caption (useful for slides)
<code>normalsize*</code>	adapt optical sizes to the normal font size (10 pt, 11 pt, 12 pt)
<code>nonormalsize</code>	use static settings for the optical sizes

Since CronosPro comes in only four different optical sizes we use a variable mapping from font size to the optical size. This means that, both for 10 pt and 11 pt documents, text set in `\small` size will use the Caption size. Sometimes it might be desirable to turn off this automatism – for instance, if you want to load the CronosPro package before the `\documentclass` command. In these cases you can use the `nonormalsize` option to do so.

### Miscellaneous options

`scale=<factor>` scale the font size by *<factor>*  
`footnotefigures` use special figures for footnote marks, i.e.,  
example<sup>6,9</sup> instead of example<sup>6,9</sup>.  
This option can only be used if the footnote marks consist *solely* of figures. Note that if you use one of the KOMA-Script classes, customization of the footnotes via `\deffootnote` before loading this package will be overwritten.

## 4 Figure selection

CronosPro offers four different figure versions. One can choose between *text figures* (lowercase figures) and *lining figures* (uppercase figures) and one can choose between *proportional figures* (figures with different widths) and *tabular figures* (all figures have the same width, useful mainly for tables).

	text figures	lining figures
proportional	o123456789	0123456789
tabular	o123456789	0123456789

The `\figureversion` command can be used to switch between different figure versions. Possible parameters are:

<code>text, osf</code>	text figures
<code>lining, lf</code>	lining figures
<code>tabular, tab</code>	tabular figures
<code>proportional, prop</code>	proportional figures

Usually it is desirable to set most text with proportional figures and to use tabular figures only in tables and lists. Unfortunately most  $\text{\LaTeX}$  document classes do not support fonts with several figure versions. Use the package `tabfigures` that patches some common document classes and packages (the standard  $\text{\LaTeX}$  classes, KOMA-Script, memoir, and amsmath) to use tabular figures at some places.

## 5 Additional font shapes and symbols

In addition to the normal small caps shape `sc` there is a letterspaced version called `ssc`. It is accessible via the commands `\sscshape` and `\textssc`. In order to use the `ssc` shape throughout your document specify `\renewcommand{\scdefault}{ssc}` in the preamble of your document.

Swash capitals like ‘*Canadian Mountain Holidays*’ are accessed via the `sw` fontshape and the commands `\swshape` and `\textsw`.

<code>sc</code>	THIS IS A SAMPLE TEXT
<code>ssc</code>	THIS IS A SAMPLE TEXT

sw     *This is a Sample Text*

Ornaments can be accessed via the pifont package with the command

```
\Pisymbol{CronosPro-Extra}{\langle number \rangle}
```

The available glyphs with their numbers are listed in the table below.

100	101	102	103	104	105	106	107	108	109	110	111	112
												

## 6 Language support

The following encodings are supported:

Latin    OT1, T1, TS1, LY1

## 7 Searching for figures or for words containing ligatures in PDF documents

Searching for figures or for words containing ligatures in PDF documents may not be possible depending on the way the PDF file was created. The following table gives an overview of which glyphs may cause problems.

font version	program	problems
1.000	Ghostscript, pre-1.40 pdfTeX	LF/TOf, non-standard ligatures, swashes
1.001, 2.000	Ghostscript, pre-1.40 pdfTeX	LF/OsF/TOf, ligatures, swashes, small caps
1.00x	Distiller, dvipdfmx	LF/TOf
1.00x	pdfTeX 1.40	ok
2.000	Distiller, dvipdfmx, pdfTeX 1.40	ok

To make figures and ligatures searchable when using pdfTeX 1.40, you need to enable glyph-to-unicode translation and load the default mapping table:

```
\input glyptounicode  
\pdfgentounicode=1
```

See the pdfTeX manual for details.

## 8 NFSS classification

Parenthesised combinations are provided via substitutions.

encoding	family	series	shape
OT1, T1, TS1, LY1	CronosPro-OsF, CronosPro-LF, CronosPro-TOsF, CronosPro-TLF	m, b (sb, bx), eb	n, it (sl), sw', sc, scit (scsl, scsw), ssc, sscit (sscs, sscsw)
U	CronosPro-Extra	m, b (sb, bx), eb	n, it (sl)

## 9 Version history

Version 0.1: First version

Version 0.2: Fix<sup>2</sup> footnotefigures option with KOMA classes

Version 0.2a: Remove<sup>3</sup> microtype warning concerning \j

Version 0.2b: Remove some unused math options and references

## 10 The main style file

### 10.1 Options

```

1 \<style>
2 \RequirePackage{kvoptions}
3 \SetupKeyvalOptions{
4   family = Cr,
5   prefix = Cr@
6 }

```

#### Font sets

The package CronosPro-FontDef adapts the font definitions to the requested font set (see section 12). So we simply pass on the relevant options including the font scale factor; only CronosPro integrals are handled here in CronosPro.

```

7 \DeclareStringOption[1.]{scale}
8 \newcommand\Cr@minionint@opticals{-NoOpticals}
9 \newcommand\Cr@minionint@bold{-Bold}
10 \DeclareVoidOption{slides}{%
11   \def\Cr@minionint@opticals{-NoOpticals}%
12   \PassOptionsToPackage{slides}{CronosPro-FontDef}}
13 \DeclareVoidOption{noopticals}{%
14   \def\Cr@minionint@opticals{-NoOpticals}%
15   \PassOptionsToPackage{noopticals}{CronosPro-FontDef}}

```

<sup>1</sup>via substitution in TS1 encoding

<sup>2</sup>based on <http://tex.stackexchange.com/a/54954/11605>

<sup>3</sup>based on <http://tex.stackexchange.com/a/222471/11605>

```

16 \DeclareVoidOption{opticals}{%
17   \def\Cr@minionint@opticals{%
18     \PassOptionsToPackage{opticals}{CronosPro-FontDef}}
19 \DeclareVoidOption{smallfamily}{%
20   \def\Cr@minionint@bold{-Bold}%
21   \PassOptionsToPackage{smallfamily}{CronosPro-FontDef}}
22 \DeclareVoidOption{medfamily}{%
23   \def\Cr@minionint@bold{-Semibold}%
24   \PassOptionsToPackage{medfamily}{CronosPro-FontDef}}
25 %\DeclareVoidOption{fullfamily}{%
26 %  \def\Cr@minionint@bold{-Semibold}%
27 %  \PassOptionsToPackage{fullfamily}{CronosPro-FontDef}}
28 \DeclareVoidOption{normalsize}{%
29   \PassOptionsToPackage{normalsize}{CronosPro-FontDef}}
30 \DeclareVoidOption{nonnormalsize}{%
31   \PassOptionsToPackage{nonnormalsize}{CronosPro-FontDef}}

```

### Figure style

```

32 \newcommand\Cr@Text@Fig{OsF}
33 %\newcommand\Cr@Math@Fig{OsF}
34 \newcommand\Cr@Text@Family{CronosPro-\Cr@Text@Fig}
35 %\newcommand\Cr@Math@Family{CronosPro-\Cr@Math@Fig}
36 %\newcommand\Cr@Math@TFamily{CronosPro-T\Cr@Math@Fig}
37 %\newcommand\Cr@Math@LetterShape{it}

38 \DeclareVoidOption{textosf}{\def\Cr@Text@Fig{OsF}}
39 \DeclareVoidOption{textlf}{\def\Cr@Text@Fig{LF}}
40 %\DeclareVoidOption{mathosf}{\def\Cr@Math@Fig{OsF}}
41 %\DeclareVoidOption{mathlf}{\def\Cr@Math@Fig{LF}}
42 \DeclareVoidOption{osf}{\setkeys{Cr}{textosf}}
43 \DeclareVoidOption{lf}{\setkeys{Cr}{textlf}}
44 %\DeclareVoidOption{osf}{\setkeys{Cr}{textosf,mathosf}}
45 %\DeclareVoidOption{lf}{\setkeys{Cr}{textlf,mathlf}}
46 %\DeclareVoidOption{mathtabular}{\let\Cr@Math@Family\Cr@Math@TFamily}

```

### Miscellaneous options

Footnote figures, extra spacing for the apostrophe.

```

47 \DeclareVoidOption{footnotefigures}{%
48   \def\@makefnmark{%
49     \begingroup
50     \normalfont
51     \fontfamily{CronosPro-Extra}\fontencoding{U}\selectfont
52     \@thefnmark
53   \endgroup}%
54   \@ifundefined{KOMAClassName}{}{\deffootnote[1em]{1.5em}{1em}{%
55     \fontfamily{CronosPro-Extra}\fontencoding{U}\selectfont\thefootnotemark}}}
56 %
57 \newcommand\Cr@Quote@Spacing{}
58 \DeclareVoidOption{loosequotes}{%

```

```
59 \def\Cr@Quote@Spacing{\Cr@Quote@Spacing@Loose}}
```

## Defaults

```
60 \ProcessKeyvalOptions{Cr}\relax
```

## 10.2 Font declarations

```
61 \RequirePackage{CronosPro-FontDef}
62 \@ifpackageloaded{textcomp}{\RequirePackage{textcomp}}
```

By default, we use `b` for the bold series. If `CronosPro-Semibold` is not available this might internally be mapped to `CronosPro-Bold` (see `CronosPro-FontDef`).

```
63 \edef\sfddefault{\Cr@Text@Family}
```

If a recent version of `microtype` is loaded then we implement an option to increase the side bearings of all quote glyphs.

```
64 \def\Cr@Quote@Spacing@Loose{%
65   \@ifpackageloaded{microtype}{\RequirePackage[kerning=true]{microtype}}
66   \@ifundefined{SetExtraKerning}{
67     \let\Cr@Set@Quote@Spacing\SetExtraKerning
68   }{\SetExtraKerning
69     [ unit = 1em ]
70     { encoding = {OT1,T1,U,LY1},
71       family   = {CronosPro-OsF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
72       shape    = n }
73     { \textquotedblleft = {30,30}, \textquotedblright = {30,30},
74       \textquoteleft    = {30,30}, \textquoteright    = {30,30} }}
75 }
76 \newcommand*\Cr@Set@Quote@Spacing[3][{}]{
77   \Cr@Quote@Spacing
78   \Cr@Set@Quote@Spacing
79   [ unit = 1em ]
80   { encoding = {OT1,T1,U,LY1},
81     family   = {CronosPro-OsF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
82     shape    = {n,it} }
83   { \textquotedblleft = {30,30}, \textquotedblright = {30,30},
84     \textquoteleft    = {30,30}, \textquoteright    = {30,30} }
```

## 10.3 Font selection

The font selection commands such as `\figureversion`, `\textsw`, and `\textssc` are provided by the package `fontaxes`.

```
85 \RequirePackage{fontaxes}[2005/05/04]
```

We define an additional short hand for compatibility's sake.

```
86 \let\oldstylenums\textfigures
```

## 10.4 pdfTeX to-unicode support

Old versions of `CronosPro` have non-standard glyph names.

```

87 \@ifundefined{pdfglyphtounicode}{%{
88   \pdfglyphtounicode{uniEFD5}{03DD}% uni03DD
89   \pdfglyphtounicode{uniEFED}{02D9}% dotaccent.cap
90   \pdfglyphtounicode{uniEFEE}{02D8}% breve.cap
91   \pdfglyphtounicode{uniEFF1}{02DB}% ogonek.cap
92   \pdfglyphtounicode{uniEFF2}{00B8}% cedilla.cap
93   \pdfglyphtounicode{uniEFF3}{02DA}% ring.cap
94   \pdfglyphtounicode{uniEFF5}{02DC}% tilde.cap
95   \pdfglyphtounicode{uniEFF7}{02C6}% circumflex.cap
96   \pdfglyphtounicode{uniF628}{2030}% perthousand.oldstyle
97   \pdfglyphtounicode{uniF62C}{0028}% parenleft.denominator
98   \pdfglyphtounicode{uniF62D}{0029}% parenright.denominator
99   \pdfglyphtounicode{uniF631}{0028}% parenleft.numerator
100  \pdfglyphtounicode{uniF632}{0029}% parenright.numerator
101  \pdfglyphtounicode{uniF638}{0030}% zero.slash
102  \pdfglyphtounicode{uniF639}{0030}% zero.fitted
103  \pdfglyphtounicode{uniF63A}{0032}% two.fitted
104  \pdfglyphtounicode{uniF63B}{0033}% three.fitted
105  \pdfglyphtounicode{uniF63C}{0034}% four.fitted
106  \pdfglyphtounicode{uniF63D}{0035}% five.fitted
107  \pdfglyphtounicode{uniF63E}{0036}% six.fitted
108  \pdfglyphtounicode{uniF63F}{0037}% seven.fitted
109  \pdfglyphtounicode{uniF640}{0038}% eight.fitted
110  \pdfglyphtounicode{uniF641}{0039}% nine.fitted
111  \pdfglyphtounicode{uniF642}{0025}% percent.oldstyle
112  \pdfglyphtounicode{uniF643}{0030}% zero.taboldstyle
113  \pdfglyphtounicode{uniF644}{0031}% one.taboldstyle
114  \pdfglyphtounicode{uniF645}{0032}% two.taboldstyle
115  \pdfglyphtounicode{uniF646}{0033}% three.taboldstyle
116  \pdfglyphtounicode{uniF647}{0034}% four.taboldstyle
117  \pdfglyphtounicode{uniF648}{0035}% five.taboldstyle
118  \pdfglyphtounicode{uniF649}{0036}% six.taboldstyle
119  \pdfglyphtounicode{uniF64A}{0037}% seven.taboldstyle
120  \pdfglyphtounicode{uniF64B}{0038}% eight.taboldstyle
121  \pdfglyphtounicode{uniF64C}{0039}% nine.taboldstyle
122  \pdfglyphtounicode{uniF64D}{20A1}% colonmonetary.taboldstyle
123  \pdfglyphtounicode{uniF64E}{20AC}% Euro.taboldstyle
124  \pdfglyphtounicode{uniF64F}{0192}% florin.taboldstyle
125  \pdfglyphtounicode{uniF650}{0023}% numbersign.taboldstyle
126  \pdfglyphtounicode{uniF651}{00A3}% sterling.taboldstyle
127  \pdfglyphtounicode{uniF652}{00A5}% yen.taboldstyle
128  \pdfglyphtounicode{uniF653}{0024}% dollar.taboldstyle
129  \pdfglyphtounicode{uniF654}{00A2}% cent.taboldstyle
130  \pdfglyphtounicode{uniF655}{0030}% zero.denominator
131  \pdfglyphtounicode{uniF656}{0031}% one.denominator
132  \pdfglyphtounicode{uniF657}{0032}% two.denominator
133  \pdfglyphtounicode{uniF658}{0033}% three.denominator
134  \pdfglyphtounicode{uniF659}{0034}% four.denominator
135  \pdfglyphtounicode{uniF65A}{0035}% five.denominator
136  \pdfglyphtounicode{uniF65B}{0036}% six.denominator

```



```

137 \pdfglyphtounicode{uniF65C}{0037}% seven.denominator
138 \pdfglyphtounicode{uniF65D}{0038}% eight.denominator
139 \pdfglyphtounicode{uniF65E}{0039}% nine.denominator
140 \pdfglyphtounicode{uniF65F}{002C}% comma.denominator
141 \pdfglyphtounicode{uniF660}{002E}% period.denominator
142 \pdfglyphtounicode{uniF661}{0030}% zero.numerator
143 \pdfglyphtounicode{uniF662}{0031}% one.numerator
144 \pdfglyphtounicode{uniF663}{0032}% two.numerator
145 \pdfglyphtounicode{uniF664}{0033}% three.numerator
146 \pdfglyphtounicode{uniF665}{0034}% four.numerator
147 \pdfglyphtounicode{uniF666}{0035}% five.numerator
148 \pdfglyphtounicode{uniF667}{0036}% six.numerator
149 \pdfglyphtounicode{uniF668}{0037}% seven.numerator
150 \pdfglyphtounicode{uniF669}{0038}% eight.numerator
151 \pdfglyphtounicode{uniF66A}{0039}% nine.numerator
152 \pdfglyphtounicode{uniF66B}{002C}% comma.numerator
153 \pdfglyphtounicode{uniF66C}{002E}% period.numerator
154 \pdfglyphtounicode{uniF66D}{0103}% abreve.sc
155 \pdfglyphtounicode{uniF66F}{0105}% aogonek.sc
156 \pdfglyphtounicode{uniF671}{0107}% cacute.sc
157 \pdfglyphtounicode{uniF672}{010D}% ccaron.sc
158 \pdfglyphtounicode{uniF675}{010F}% dcaron.sc
159 \pdfglyphtounicode{uniF676}{0111}% dcroat.sc
160 \pdfglyphtounicode{uniF678}{011B}% ecaron.sc
161 \pdfglyphtounicode{uniF67B}{014B}% eng.sc
162 \pdfglyphtounicode{uniF67C}{0119}% eogonek.sc
163 \pdfglyphtounicode{uniF67D}{011F}% gbreve.sc
164 \pdfglyphtounicode{uniF684}{0133}% ij.sc
165 \pdfglyphtounicode{uniF687}{0129}% itilde.sc
166 \pdfglyphtounicode{uniF68A}{013A}% lacute.sc
167 \pdfglyphtounicode{uniF68B}{013E}% lcaron.sc
168 \pdfglyphtounicode{uniF68E}{0144}% nacute.sc
169 \pdfglyphtounicode{uniF68F}{0148}% ncaron.sc
170 \pdfglyphtounicode{uniF692}{0151}% ohungarumlaut.sc
171 \pdfglyphtounicode{uniF695}{0155}% racute.sc
172 \pdfglyphtounicode{uniF696}{0159}% rcaron.sc
173 \pdfglyphtounicode{uniF698}{015B}% sacute.sc
174 \pdfglyphtounicode{uniF699}{015F}% scedilla.sc
175 \pdfglyphtounicode{uniF69D}{0165}% tcaron.sc
176 \pdfglyphtounicode{uniF69E}{0163}% tcommaaccent.sc
177 \pdfglyphtounicode{uniF6A0}{0171}% uhungarumlaut.sc
178 \pdfglyphtounicode{uniF6A3}{016F}% uring.sc
179 \pdfglyphtounicode{uniF6A4}{0169}% utilde.sc
180 \pdfglyphtounicode{uniF6AA}{1EF3}% ygrave.sc
181 \pdfglyphtounicode{uniF6AB}{017A}% zacute.sc
182 \pdfglyphtounicode{uniF6AC}{017C}% zdotaccent.sc
183 \pdfglyphtounicode{uniF6DC}{0031}% one.fitted
184 }

```

## 10.5 Superior and inferior figures

We define commands to convert numbers to numerator figures and denominator figures.

```

185 \def\@for@tok#1:=#2\do#3{%
186   \expandafter\def\expandafter\@fortmp\expandafter{#2}%
187   \ifx\@fortmp\@empty \else
188     \expandafter\@forloop@tok#2\@nil\@nil\@@#1{#3}%
189   \fi}
190 \def\@forloop@tok#1#2#3\@@#4#5{%
191   \def#4{#1}%
192   \ifx #4\@nnil \else
193     #5%
194     \def#4{#2}%
195     \ifx #4\@nnil \else
196       #5\@forloop@tok #3\@@#4{#5}%
197     \fi\fi}
198 \def\@iforloop@tok#1#2\@@#3#4{%
199   \def#3{#1}%
200   \ifx #3\@nnil
201     \expandafter\@fornoop
202   \else
203     #4\relax\expandafter\@iforloop@tok
204   \fi
205   #2\@@#3{#4}}
206 %
207 \newcommand*\Cr@extra@font{%
208   \fontencoding{U}\fontfamily{CronosPro-Extra}\selectfont}
209 \newcommand*\Cr@numerator@fig[1]{\Cr@extra@font\Cr@@numerator@fig{#1}}
210 \newcommand*\Cr@denominator@fig[1]{\Cr@extra@font\Cr@@denominator@fig{#1}}
211 \newcommand*\Cr@superior@fig[1]{\Cr@extra@font\Cr@@superior@fig{#1}}
212 \newcommand*\Cr@inferior@fig[1]{\Cr@extra@font\Cr@@inferior@fig{#1}}
213 \newcommand*\Cr@@numerator@fig[1]{%
214   \@for@tok\@nf@fig:=#1\do{%
215     \ifcase\@nf@fig
216       \char'00%
217     \or\char'01%
218     \or\char'02%
219     \or\char'03%
220     \or\char'04%
221     \or\char'05%
222     \or\char'06%
223     \or\char'07%
224     \or\char'10%
225     \or\char'11%
226     \else
227       \@latex@error{invalid argument to \string\Cr@@numerator@fig}%
228     \fi
229   }}
230 \newcommand*\Cr@@denominator@fig[1]{%
231   \@for@tok\@nf@fig:=#1\do{%

```

```

232 \ifcase\@nf@fig
233     \char'20%
234 \or\char'21%
235 \or\char'22%
236 \or\char'23%
237 \or\char'24%
238 \or\char'25%
239 \or\char'26%
240 \or\char'27%
241 \or\char'30%
242 \or\char'31%
243 \else
244     \@latex@error{invalid argument to \string\Cr@@denominator@fig}%
245 \fi
246 }}
247 \newcommand*\Cr@@superior@fig[1]{%
248     \@for@tok\@nf@fig:=#1\do{%
249         \ifcase\@nf@fig
250             \char'60%
251         \or\char'61%
252         \or\char'62%
253         \or\char'63%
254         \or\char'64%
255         \or\char'65%
256         \or\char'66%
257         \or\char'67%
258         \or\char'70%
259         \or\char'71%
260         \else
261             \@latex@error{invalid argument to \string\Cr@@superior@fig}%
262         \fi
263     }}
264 \newcommand*\Cr@@inferior@fig[1]{%
265     \@for@tok\@nf@fig:=#1\do{%
266         \ifcase\@nf@fig
267             \char'100%
268         \or\char'101%
269         \or\char'102%
270         \or\char'103%
271         \or\char'104%
272         \or\char'105%
273         \or\char'106%
274         \or\char'107%
275         \or\char'110%
276         \or\char'111%
277         \else
278             \@latex@error{invalid argument to \string\Cr@@inferior@fig}%
279         \fi
280     }}

```

`\Cr@ensure@text` switches to text mode, if necessary.

```

281 \newcommand*\Cr@ensure@text[1]{%
282   \ifmmode
283     \Mn@Text@With@MathVersion{#1}%
284   \else
285     #1%
286   \fi}

```

`\smallfrac` and `\slantfrac` assemble numerical fractions.

```

287 \newcommand*\Cr@smallfrac[2]{%
288   \leavevmode
289   \setbox\@tempboxa
290     \vbox{%
291       \baselineskip\z@skip%
292       \lineskip.25ex%
293       \lineskiplimit-\maxdimen
294       \ialign{\hfil##\hfil\cr
295         \vbox to 2.13ex{\vss\hbox{\Cr@numerator@fig{#1}}\vskip.68ex}\cr
296         \leavevmode\leaders\hrule height 1.1ex depth -1.01ex\hfill\cr
297         \vtop to 1ex{\vbox{}}\hbox{\Cr@denominator@fig{#2}}\vss}\cr
298       \noalign{\vskip-1.47ex}}}%
299   \dp\@tempboxa=0.49ex%
300   \box\@tempboxa}
301 \newcommand*\Cr@slantfrac[2]{%
302   {\Cr@extra@font\Cr@numerator@fig{#1}\kern-0.05em/\kern-0.06em\Cr@denominator@fig{#2}}}
303 \DeclareRobustCommand*\smallfrac[2]{\Cr@ensure@text{\kern0.06em\Cr@smallfrac{#1}{#2}}\kern0.09em}
304 \DeclareRobustCommand*\slantfrac[2]{\Cr@ensure@text{\kern0.06em\Cr@slantfrac{#1}{#2}}\kern0.09em}

```

## 10.6 Additional symbols

```

305 % fix \r A
306 \DeclareTextCompositeCommand{\r}{OT1}{A}
307 {\leavevmode\setbox\z@\hbox{!}\dimen@ht\z@\advance\dimen@-1ex%
308   \oalign{\hss\raise.67\dimen@\hbox{\char23}\hss\cr A}}
309
310 \DeclareEncodingSubset{TS1}{CronosPro-LF} {1}%
311 \DeclareEncodingSubset{TS1}{CronosPro-TLF} {1}%
312 \DeclareEncodingSubset{TS1}{CronosPro-OsF} {1}%
313 \DeclareEncodingSubset{TS1}{CronosPro-TOfF}{1}%
314 \AtBeginDocument{
315   \UndeclareTextCommand{\textvisiblespace}{T1}%
316   \UndeclareTextCommand{\textcompwordmark}{T1}%
317   \UndeclareTextCommand{\textsterling}{T1}%
318   \UndeclareTextCommand{\j}{T1}%
319   \UndeclareTextCommand{\j}{LY1}%
320 }

```

## 10.7 Logos

Correct logos.

```

321 \def\TeX{T\kern-.1667em\lower.4ex\hbox{E}\kern-.125emX\@}
322 \DeclareRobustCommand{\LaTeX}{L\kern-.32em%
323   {\sbox\z@ T%
324     \vbox to\ht\z@{\hbox{\check@mathfonts
325       \fontsize\sf@size\z@
326       \math@fontsfalse\selectfont
327       A}%
328     \vss}%
329   }%
330   \kern-.15em%
331   \TeX}

```

Make the changes take effect. This concludes the main style file.

```

332 %\normalfont
333 </style>

```

## 11 Support for character protrusion

The microtype configuration. All four CronosPro families use the same file (cf. section 12). The inheritance tables are taken from microtype.cfg except \j.

```

334 <*mtcfg>
335 \DeclareCharacterInheritance
336 { encoding = T1,
337   family = {CronosPro-OfF,CronosPro-LF,CronosPro-TOfF,CronosPro-TLF} }
338 { A = {\‘A,\’A,\^A,\~A,\"A,\r A,\k A,\u A},
339   a = {\‘a,\’a,\^a,\~a,\"a,\r a,\k a,\u a},
340   C = {\‘C,\c C,\v C},
341   c = {\‘c,\c c,\v c},
342   D = {\v D,\DH},
343   d = {\v d,\dj},
344   E = {\‘E,\’E,\^E,\~E,\"E,\k E,\v E},
345   e = {\‘e,\’e,\^e,\~e,\"e,\k e,\v e},
346   f = {027}, % ff
347   G = {\u G},
348   g = {\u g},
349   I = {\‘I,\’I,\^I,\~I,\"I,\.I},
350   i = {\‘i,\’i,\^i,\~i,\"i,\i},
351   % j = {\j},
352   L = {\L,\’L,\v L},
353   l = {\l,\’l,\v l},
354   N = {\‘N,\~N,\v N},
355   n = {\‘n,\~n,\v n},
356   O = {\O,\‘O,\’O,\^O,\~O,\"O,\H O},
357   o = {\o,\‘o,\’o,\^o,\~o,\"o,\H o},
358   R = {\‘R,\v R},
359   r = {\‘r,\v r},
360   S = {\‘S,\c S,\v S,\SS},
361   s = {\‘s,\c s,\v s},
362   T = {\c T,\v T},

```

```

363     t = {\c t,\v t},
364     U = {\'U,\'U,\^U,\"U,\H U,\r U},
365     u = {\'u,\'u,\^u,\"u,\H u,\r u},
366     Y = {\'Y,\"Y},
367     y = {\'y,\"y},
368     Z = {\'Z,\.Z,\v Z},
369     z = {\'z,\.z,\v z}
370 }
371 \SetProtrusion
372 [ name      = CronosPro-OT1-Roman ]
373 { encoding = OT1,
374   family   = {CronosPro-OfF,CronosPro-LF,CronosPro-TOsF,CronosPro-TLF},
375   shape     = n }
376 {
377     A = {40,40},
378     F = { ,60},
379     J = {90, },
380     K = { ,50},
381     L = { ,60},
382     T = {50,50},
383     V = {40,40},
384     W = {30,30},
385     X = {50,50},
386     Y = {50,50},
387     k = { ,60},
388     r = { ,80},
389     t = { ,100},
390     v = {70,70},
391     w = {40,40},
392     x = {60,60},
393     y = {70,70},
394     ! = {70,180},
395     ( = {60,30}, ) = {30,60},
396     [ = {100,160}, ] = {160,100},
397     {,} = {440,700},
398     . = {660,700},
399     : = {400,480},
400     ; = {350,440},
401     - = {700,700},
402     \textendash      = {390,480}, \textemdash      = {220,270},
403     \textquotedblleft = {380,250}, \textquotedblright = {250,380},
404     \textquoteleft    = {670,450}, \textquoteright    = {450,670},
405 }
406 \SetProtrusion
407 [ name      = CronosPro-T1-Roman,
408   load      = CronosPro-OT1-Roman ]
409 { encoding = T1,
410   family   = {CronosPro-OfF,CronosPro-LF,CronosPro-TOsF,CronosPro-TLF},
411   shape     = n }

```

```

412 {
413     023 = { ,40}, % fft ligature
414     032 = { ,50}, % ft ligature
415     191 = {30,30}, % Th ligature
416     127 = {620,700}, % hyphen
417     \AE = {40, }, % AE
418     \quotesinglbase = {670,670}, \quotedblbase = {370,370},
419     \guilsinglleft = {500,360}, \guilsinglright = {360,500},
420     \guillemotleft = {320,230}, \guillemotright = {230,320},
421 }

422 \SetProtrusion
423 [ name = CronosPro-OT1-Italic]
424 { encoding = OT1,
425     family = {CronosPro-OsF,CronosPro-LF,CronosPro-TOsF,CronosPro-TLF},
426     shape = {it,sl,sw} }
427 {
428     A = {120,50},
429     B = {90,-50},
430     C = {50,-60},
431     D = {70,-30},
432     E = {90,-50},
433     F = {100,-40},
434     G = {50,-60},
435     H = {70,-40},
436     I = {150,-90},
437     J = {250,-130},
438     K = {80,-50},
439     L = {90,60},
440     M = {60,-40},
441     N = {70,-40},
442     O = {70,-30},
443     P = {70,-110},
444     Q = {40,-40},
445     R = {80,-50},
446     S = {70,-70},
447     T = {130, },
448     U = {70,-40},
449     V = {120,30},
450     W = {90,20},
451     X = {50, },
452     Y = {160, },
453     Z = {50,-50},
454     d = {60,-60},
455     f = { , -190},
456     027 = { , -70}, % ff ligature
457     g = {-70,-70},
458     i = { , -110},
459     025 = { , -60}, % dotlessi
460     028 = { , -60}, % fi ligature

```

```

461 030 = { , -30}, % ffi ligature
462 j = {-90, -150},
463 p = {-40, },
464 r = { , 80},
465 t = { , 100},
466 v = {90, },
467 w = {60, 10},
468 x = {90, },
469 ! = {190, 40},
470 ( = {90, }, ) = {90, },
471 [ = {90, 90}, ] = {120, 60},
472 {, } = {210, 680},
473 . = {640, 680},
474 : = {380, 430},
475 ; = { , 430},
476 - = {750, 750},
477 \textquoteleft = {690, 140}, \textquoteright = {470, 230},
478 \textendash = {400, 500}, \textemdash = {220, 280},
479 \textquotedblleft = {520, 130}, \textquotedblright = {520, 130},
480 }

481 \SetProtrusion
482 [ name = CronosPro-T1-Italic,
483 load = CronosPro-OT1-Italic ]
484 { encoding = T1,
485 family = {CronosPro-OsF, CronosPro-LF, CronosPro-T0sF, CronosPro-TLF},
486 shape = {it, sl, sw} }
487 {
488 023 = { , 40}, % ffi ligature
489 032 = { , 50}, % ft ligature
490 191 = {80, 30}, % Th ligature
491 127 = {660, 750}, % hyphen
492 \AE = {90, -40}, % AE
493 131 = {80, -30}, % Dcaron
494 132 = {70, -40}, % Ecaron
495 156 = {80, -60}, % IJ
496 \OE = {50, -30}, % OE
497 188 = { , -80}, % ij
498 184 = {70, 70}, % ydieresis
499 253 = {70, 70}, % yacute
500 \quotesinglbase = {220, 700}, \quotedblbase = {130, 400},
501 \guilsinglleft = {500, 180}, \guilsinglright = {350, 350},
502 \guillemotleft = {310, 110}, \guillemotright = {230, 230},
503 }

```

We have no protruding values for small caps yet. The following stubs are unnecessary at the moment, but they are here as a reminder.

```

504 \SetProtrusion
505 [ name = CronosPro-OT1-Smallcaps ]
506 { encoding = OT1,

```



```

507     family    = {CronosPro-0sF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
508     shape     = {sc,ssc} }
509 {}

510 \SetProtrusion
511 [ name       = CronosPro-T1-Smallcaps,
512   load       = CronosPro-OT1-Smallcaps ]
513 { encoding = T1,
514   family     = {CronosPro-0sF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
515   shape      = {sc,ssc} }
516 {}

517 \SetProtrusion
518 [ name       = CronosPro-OT1-SmallcapsItalic ]
519 { encoding = OT1,
520   family     = {CronosPro-0sF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
521   shape      = {scit,sscit} }
522 {}

523 \SetProtrusion
524 [ name       = CronosPro-T1-SmallcapsItalic,
525   load       = CronosPro-OT1-SmallcapsItalic ]
526 { encoding = T1,
527   family     = {CronosPro-0sF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
528   shape      = {scit,sscit} }
529 {}

530 \SetProtrusion
531 [ name       = CronosPro-other-Roman ]
532 { encoding = {U},
533   family     = {CronosPro-0sF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
534   shape      = n }
535 {
536   ! = {70,180},
537   ( = {60,30},   ) = {30,60},
538   [ = {100,160}, ] = {160,100},
539   {,} = {440,700},
540   . = {660,700},
541   : = {400,480},
542   ; = {350,440},
543   - = {700,700},
544   \textendash      = {390,480},   \textemdash      = {220,270},
545   \textquotedblleft = {380,250},   \textquotedblright = {250,380},
546   \textquoteleft    = {670,450},   \textquoteright    = {450,670},
547 }

548 \SetProtrusion
549 [ name       = CronosPro-other-Italic ]
550 { encoding = {U},
551   family     = {CronosPro-0sF,CronosPro-LF,CronosPro-T0sF,CronosPro-TLF},
552   shape      = {it,sl,sw} }
553 {
554   ! = {190,40},
555   ( = {90,  },   ) = {90,  },

```

```

556      [ = {90,90},      ] = {120,60},
557      {,} = {210,680},
558      . = {640,680},
559      : = {380,430},
560      ; = { ,430},
561      - = {750,750},
562      \textquoteleft    = {690,140}, \textquoteright    = {470,230},
563      \textendash       = {400,500}, \textemdash       = {220,280},
564      \textquotedblleft = {520,130}, \textquotedblright = {520,130},
565    }
566 \end{mtcfg}

```

## 12 Font definition files

As all the font definitions look the same we introduce macros to ease the configuration. These macros are stored in the file `CronosPro-FontDef.sty` which is included by every `FD` file. Note that `CronosPro-FontDef.sty` will be included several times and that we do not know in which context the code is executed. Therefore, we have to define all non-private commands as globals.

Since this package should be loadable in an `FD` file we have to avoid all `\preambleonly` commands. Therefore, we use `\ProvidesFile` instead of `\ProvidesPackage`.

We add a guard so that this file is executed only once even if it is included multiple times.

```

567 \fontdef
568 \ifx\Cr@DeclareFontShape\@undefined\else\endinput\fi

```

We distinguish between being loaded directly or via `\usepackage` in the preamble by checking `\@nodocument`.

```

569 \ifx\@nodocument\relax
570   \input{otfontdef.sty}
571 \else
572   \NeedsTeXFormat{LaTeX2e}
573   \RequirePackage{otfontdef}
574 \fi

```

Reset `\escapechar` (which is set to `-1` in `FD` files) to make `\newcommand` work. The additional group does not harm; we have to make the important commands global anyway.

```

575 \ifx\@nodocument\relax
576   \begingroup\escapechar'\
577 \fi

```

These are the default values if it is impossible to process options.

```

578 \newcommand\Cr@option@opticals{noopticals}
579 \newcommand\Cr@option@fontset{smallfamily}
580 \newdimen\Cr@option@normalsize
581 \global\Cr@option@normalsize10pt

```

Whether we should adapt the configuration to the `\normalsize` of the document. This switch is only needed locally.

```

582 \newif\ifCr@option@normalsize
583 \Cr@option@normalsizefalse

```

```

584 \ifx\@nodocument\relax\else
585 \DeclareOption{slides} {\let\Cr@option@opticals\CurrentOption}
586 \DeclareOption{opticals} {\let\Cr@option@opticals\CurrentOption}
587 \DeclareOption{noopticals} {\let\Cr@option@opticals\CurrentOption}
588 \DeclareOption{smallfamily} {\let\Cr@option@fontset\CurrentOption}
589 \DeclareOption{medfamily} {\let\Cr@option@fontset\CurrentOption}
590 % \DeclareOption{fullfamily} {\let\Cr@option@fontset\CurrentOption}
591 \DeclareOption{normalsize} {\Cr@option@normalsize=true}
592 \DeclareOption{nonnormalsize} {\Cr@option@normalsize=false}
593 \ExecuteOptions{smallfamily,noopticals,normalsize}
594 \ProcessOptions\relax
595 \fi

```

The method to determine the main font size is inspired by microtype's implementation.

```

596 \ifCr@option@normalsize
597 \begingroup
598 \def\set@fontsize#1#2#3#4\@nil{%
599 \@defaultunits\global\Cr@option@normalsize#2pt\relax\@nnil}%
600 \normalsize\@nil
601 \endgroup
602 \fi

```

We use `\otf@makeglobal` from `otfontdef` to “export” the definitions that are needed globally.

```

603 \otf@makeglobal{Cr@option@opticals}
604 \otf@makeglobal{Cr@option@fontset}
605 \ifx\@nodocument\relax\else
606 \PackageInfo{CronosPro-FontDef}{%
607 Configuration:\space\Cr@option@fontset,\space\Cr@option@opticals,\space
608 normalsize=\the\Cr@option@normalsize}%
609 \fi

```

### Configuration database

```

610 \newcount\Cr@config@cnt
611 \Cr@config@cnt=0
612 \newcommand\Cr@curr@config{\Cr@config@\romannumeral\Cr@config@cnt}

```

These commands help in setting up the configuration database. They do not need to be global. But the config database itself has to be.

#3 is added to all instances listed in #2 of configuration class #1. #3 is read with NFSS catcodes.

```

613 \newcommand\Cr@AddToConfig{%
614 \begingroup
615 \nfss@catcodes
616 \expandafter\endgroup
617 \Cr@AddToConfig@
618 }
619 \newcommand\Cr@AddToConfig@[3]{%
620 \advance\Cr@config@cnt\@ne
621 \@namedef{\Cr@curr@config}{#3}%

```

```

622 \otf@makeglobal{\Cr@curr@config}
623 <debug & show>\expandafter\show\csname\Cr@curr@config\endcsname
624 \@for\Cr@tempa:=#2\do{%
625 \@ifundefined{Cr@config@#1@\Cr@tempa}{%
626 \@temptokena{%
627 }{%
628 \@temptokena\expandafter\expandafter\expandafter
629 {\csname Cr@config@#1@\Cr@tempa\endcsname}%
630 }%
631 \@expandtwoargs\@namedef{Cr@config@#1@\Cr@tempa}{%
632 \the\@temptokena
633 \expandafter\noexpand\csname\Cr@curr@config\endcsname
634 }%
635 \otf@makeglobal{Cr@config@#1@\Cr@tempa}% perhaps defer to only execute once
636 <debug & show>\expandafter\show\csname Cr@config@#1@\Cr@tempa\endcsname
637 }%
638 }

```

Let us look at an example of how the configuration database looks internally for (shape, sw), which is specified below in three steps. The following lines show different depths of expansion of the macro \Cr@config@shape@sw, which finally yields the complete configuration:

```

\Cr@config@shape@sw
\Cr@config@xi \Cr@config@xiv \Cr@config@xv
<-8>otf*[spacing=11]<->otf*[variant=swash]<->otf*CronosPro-It

```

The following commands are used in the Declare...Family commands to access the previously built configuration database. They must be expandable. #3 is used as a default if no entry is found in the database.

```

639 \newcommand*\Cr@UseConfig[2]{%
640 \Cr@UseConfigOrDefault{#1}{#2}{}%
641 }
642 \newcommand*\Cr@UseConfigOrDefault[3]{%
643 \@ifundefined{Cr@config@#1@#2}{#3}%
644 {\@nameuse{Cr@config@#1@#2}}%
645 }
646 \newcommand*\Cr@TheConfig[2]{%
647 \@ifundefined{Cr@config@#1@#2}{}%
648 \expandafter\noexpand\csname Cr@config@#1@#2\endcsname
649 }%
650 }
651 \otf@makeglobal{Cr@UseConfig}
652 \otf@makeglobal{Cr@UseConfigOrDefault}
653 \otf@makeglobal{Cr@TheConfig}

```

The size range in the configuration has to be divided by the scaling factor to take the changed size into account because the scaling takes place after choosing the right combination. Provide calculation routine here.

```

654 \RequirePackage{fltpoint}
655 \fpDecimalSign{.}
656 \newcommand*\Cr@calc@bsize[2]{\fpDiv{#1}{#2}{\Cr@scale}}

```

Here comes the configuration.

```
657 \Cr@calc@bsize{\Cr@s@capt}{8.5}
658 \Cr@calc@bsize{\Cr@s@text}{13.1}
659 \Cr@calc@bsize{\Cr@s@subh}{20}
660 \Cr@AddToConfig{opticals}{opticals}{
661     <-\Cr@s@capt>    otf* [optical=Capt]
662     <\Cr@s@capt-\Cr@s@text> otf* [optical=Text]
663     <\Cr@s@text-\Cr@s@subh> otf* [optical=Subh]
664     <\Cr@s@subh->      otf* [optical=Disp]
665 }
666 \Cr@AddToConfig{opticals}{noopticals}{
667     <->      otf* [optical=Text]
668 }
669 \Cr@AddToConfig{opticals}{slides}{
670     <->      otf* [optical=Capt]
671 }

672 \ifdim\Cr@option@normalsize<10.1pt
673   \Cr@calc@bsize{\Cr@s@semif}{6}
674   \Cr@calc@bsize{\Cr@s@medif}{8.5}
675 \else
676   \Cr@calc@bsize{\Cr@s@semif}{6}
677   \Cr@calc@bsize{\Cr@s@medif}{10.1}
678 \fi
679 \Cr@AddToConfig{fontset/weight}{fullfamily/m}{
680     < -\Cr@s@semif>    otf* [weight=Semibold]
681     <\Cr@s@semif-\Cr@s@medif> otf* [weight=Medium]
682     <\Cr@s@medif->      otf* [weight=Regular]
683 }
684 \Cr@calc@bsize{\Cr@s@semim}{6}
685 \Cr@AddToConfig{fontset/weight}{medfamily/m}{
686     <-\Cr@s@semim>    otf* [weight=Semibold]
687     <\Cr@s@semim->      otf* [weight=Regular]
688 }
689 \Cr@AddToConfig{fontset/weight}{smallfamily/m}{
690     <->      otf* [weight=Regular]
691 }
692 %
693 \Cr@calc@bsize{\Cr@s@bold}{6}
694 \Cr@AddToConfig{fontset/weight}{fullfamily/b,medfamily/b}{
695     <-\Cr@s@bold>    otf* [weight=Bold]
696     <\Cr@s@bold->      otf* [weight=Semibold]
697 }
698 \Cr@AddToConfig{fontset/weight}{smallfamily/b}{
699     <->      otf* [weight=Bold]
700 }
701 %
702 \Cr@AddToConfig{weight}{eb}{
703     <->      otf* [weight=Bold]
704 }
```

```

705 \Cr@AddToConfig{shape}{ssc,sscit}{
706     <->      otf* [spacing=12]
707 }
708 \Cr@calc@bsize{\Cr@s@spac}{8}
709 \Cr@AddToConfig{shape}{n,it,sw,sc,scit}{
710     <-\Cr@s@spac>      otf* [spacing=11]
711 }
712 \Cr@AddToConfig{encoding/shape}{U/n,U/it}{
713     <->      otf* [spacing=]
714 }
715 %
716 \Cr@AddToConfig{shape}{sc,ssc,scit,sscit}{
717     <->      otf* [variant=sc]
718 }
719 \Cr@AddToConfig{shape}{sw}{
720     <->      otf* [variant=swash]
721 }
722 \Cr@AddToConfig{shape}{it,scit,sscit,sw}{
723     <->      otf* CronosPro-It
724 }
725 \Cr@AddToConfig{shape}{n,sc,ssc}{
726     <->      otf* CronosPro
727 }
728 \Cr@AddToConfig{encoding/shape}{OML/it}{
729     <->      otf* [figures=] CronosPro-Mixed
730 }
731 \Cr@AddToConfig{encoding/shape}{OML/n}{
732     <->      otf* [figures=] CronosPro-French
733 }
734 \Cr@AddToConfig{scale}{scale}{
735     <->      otf* [scale=\Cr@scale]
736 }

```

#### Substitutions

```

737 \Cr@AddToConfig{sub:series} {sb}      {b}
738 \Cr@AddToConfig{sub:series} {bx}      {b}
739 \Cr@AddToConfig{sub:shape}   {sl}      {it}
740 \Cr@AddToConfig{sub:shape}   {scsl}    {scit}
741 \Cr@AddToConfig{sub:shape}   {sscs1}   {sscit}
742 \Cr@AddToConfig{sub:shape}   {scsw}    {scit}
743 \Cr@AddToConfig{sub:shape}   {sscsw}   {sscit}
744 \Cr@AddToConfig{sub:encoding/shape}{TS1/sw}{it}

```

#### Code for the last argument of \DeclareFontShape

```

745 \Cr@AddToConfig{code:shape}{sw}{
746     \skewchar\font='337
747 }

```

#### Declaration of font families and shapes

```
748 \newcommand*\Cr@DeclareFontShape[6] [] {%
```

Check if any substitutions are specified.

```
749 \edef\@tempa{%
750 \Cr@UseConfig{sub:series}{#4}%
751 \Cr@UseConfigOrDefault{sub:encoding/shape}{#2/#5}{%
752 \Cr@UseConfig{sub:shape}{#5}}%
753 }%
754 \ifx\@tempa\@empty
```

Collect the configuration and declare the font shape. \DeclareFontShape fully expands its fifth argument (with our macros \Cr@UseConfig in it), but we have to retrieve the code for the sixth argument ourselves.

```
755 \@temptokena={%
756 \DeclareFontShape{#2}{#3-#6}{#4}{#5}{%
757 \Cr@UseConfig{opticals} {\Cr@option@opticals}%
758 \Cr@UseConfig{fontset/weight}{\Cr@option@fontset/#4}%
759 \Cr@UseConfig{weight} {#4}%
760 \Cr@UseConfig{encoding/shape}{#2/#5}%
761 \Cr@UseConfig{shape} {#5}%
762 \Cr@UseConfig{scale} {scale}%
763 }}%
764 \edef\@tempa{\the\@temptokena\Cr@TheConfig{code:shape}{#5}}}%
765 \@tempa
766 \else
```

Generate the substitution. (All substitutions are silent at the moment.)

```
767 \DeclareFontShape{#2}{#3-#6}{#4}{#5}{%
768 <->ssub*#3-#6%
769 /\Cr@UseConfigOrDefault{sub:series}{#4}{#4}%
770 /\Cr@UseConfigOrDefault{sub:encoding/shape}{#2/#5}{%
771 \Cr@UseConfigOrDefault{sub:shape}{#5}{#5}}%
772 }{%}%
773 \fi
774 }
775 \otf@makeglobal{\Cr@DeclareFontShape}
776 \otf@makeglobal{\string\Cr@DeclareFontShape}
```

#2 contains the encoding, #3 the family, and #1 a list of figure versions (or Extra).

```
777 \newcommand*\Cr@DeclareLargeFontFamily[3] [LF,OsF,TLF,TOfF] {%
778 \Cr@DeclareFontFamily{#1}{#2}{#3}
779 {m, sb, b, bx, eb} {n, it, sc, ssc, scit, sscit, sw, scsl, scsw, sscsl, sscsw, sl}%
780 }
781 \newcommand*\Cr@DeclareSmallFontFamily[3] [LF,OsF,TLF,TOfF] {%
782 \Cr@DeclareFontFamily{#1}{#2}{#3}
783 {m, sb, b, bx, eb} {n, it, sl}%
784 }
785 \newcommand*\Cr@DeclareMathFontFamily[3] [TOfF] {%
786 \Cr@DeclareFontFamily[\skewchar\font=255]{#1}{#2}{#3}
787 {m, sb, b, bx, eb} {n, it}%
788 }
```

An additional macro `\csname\string\foo\endcsname` is generated by `\newcommand` for processing an optional argument of `\foo`.

```

789 \otf@makeglobal{Cr@DeclareLargeFontFamily}
790 \otf@makeglobal{\string\Cr@DeclareLargeFontFamily}
791 \otf@makeglobal{Cr@DeclareSmallFontFamily}
792 \otf@makeglobal{\string\Cr@DeclareSmallFontFamily}
793 \otf@makeglobal{Cr@DeclareMathFontFamily}
794 \otf@makeglobal{\string\Cr@DeclareMathFontFamily}
795 \newcommand*{Cr@DeclareFontFamily}[6][]{%
796   \@for\Cr@variant:=#2\do{%
797     \DeclareFontFamily {#3}{#4-\Cr@variant}{#1}%
798   }%
799   \Cr@DeclareFontShapes{#3}{#4}
800   {#5} {#6} {#2}%
801 }
802 \otf@makeglobal{Cr@DeclareFontFamily}
803 \otf@makeglobal{\string\Cr@DeclareFontFamily}
804 \newcommand*{Cr@DeclareFontShapes}[5]{%
805   \@for\Cr@series:=#3\do{%
806     \@for\Cr@shape:=#4\do{%
807       \@for\Cr@variant:=#5\do{%
808         \Cr@DeclareFontShape{#1}{#2}{\Cr@series}{\Cr@shape}{\Cr@variant}%
809       }%
810     }%
811   }%
812 }
813 \otf@makeglobal{Cr@DeclareFontShapes}

```

Adjust font dimension #1 of the current font. The function in #2 should replace the old value in `\Cr@fontdimen` with a new one (which may depend on other parameters like `\f@size`).

```

814 \newdimen\Cr@fontdimen
815 \newcommand*{Cr@adjust@fontdimen}[2]{%
816   \Cr@fontdimen=\fontdimen#1\font
817   #2%
818   \fontdimen#1\font=\Cr@fontdimen
819 }
820 \otf@makeglobal{Cr@adjust@fontdimen}
821 \ifx\@nodocument\relax
822   \endgroup
823 \fi
824 (*debug)
825 \newcommand\old@DeclareFontFamily{}
826 \let\old@DeclareFontFamily\DeclareFontFamily
827 \renewcommand\DeclareFontFamily[3]{
828   \begingroup\escapechar'\%
829   \edef\@tempa{\noexpand\DeclareFontFamily{#1}{#2}}%
830   \@temptokena\expandafter{\@tempa{#3}}%
831   \message{\the\@temptokena}%

```



```

832 \endgroup
833 \old@DeclareFontFamily{#1}{#2}{#3}%
834 }
835 \newcommand\old@DeclareFontShape{}
836 \let\old@DeclareFontShape\DeclareFontShape
837 \renewcommand\DeclareFontShape[6]{
838 \begingroup\escapechar'\%
839 \edef\@tempa{\noexpand\DeclareFontShape{#1}{#2}{#3}{#4}{#5}}%
840 \@temptokena\expandafter{\@tempa{#6}}%
841 \message{\the\@temptokena}%
842 \endgroup
843 \old@DeclareFontShape{#1}{#2}{#3}{#4}{#5}{#6}%
844 }
845 \</debug>

```

We define font family aliases so that we can place all configurations for the CronosPro family variants into one microtype file: mt-CronosPro.cfg. We use microtype's hook if microtype has not been loaded yet (which should be the case); otherwise we can execute the alias definitions directly.

```

846 \gdef\Cr@MicroType@Aliases{%
847 \DeclareMicrotypeAlias{CronosPro-LF}{CronosPro}%
848 \DeclareMicrotypeAlias{CronosPro-OfF}{CronosPro}%
849 \DeclareMicrotypeAlias{CronosPro-TLF}{CronosPro}%
850 \DeclareMicrotypeAlias{CronosPro-TOfF}{CronosPro}%
851 }
852 \@ifundefined{Microtype@Hook}{%
853 \global\let\Microtype@Hook\Cr@MicroType@Aliases
854 }{%
855 \g@addto@macro\Microtype@Hook{\Cr@MicroType@Aliases}%
856 }%
857 \@ifundefined{DeclareMicroTypeAlias}{\Cr@MicroType@Aliases}%
858 \</fontdef>

```

Using these macros the various FD files become simple one-liners.

```

859 \<fd>
860 \input{CronosPro-FontDef.sty}%
861 \<Uextra> \Cr@DeclareSmallFontFamily[Extra]{U} {CronosPro}
862 \<OT1> \Cr@DeclareLargeFontFamily {OT1}{CronosPro}
863 \<T1> \Cr@DeclareLargeFontFamily {T1} {CronosPro}
864 \<LY1> \Cr@DeclareLargeFontFamily {LY1}{CronosPro}
865 \<TS1> \Cr@DeclareLargeFontFamily {TS1}{CronosPro}
866 \</fd>

```