

LATEX Support for Linux Libertine and Biolinum Fonts

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1 Introduction

This package provides support for use of the Linux Libertine and Linux Biolinum families of fonts in \LaTeX . Most features are usable with \LaTeX and dvips, pdf \LaTeX , xe \LaTeX and lua \LaTeX ; the features in Section 5 are only usable with xe \LaTeX or lua \LaTeX . This package compatibly replaces several earlier packages (`libertine-type1`, `biolinum-type1`, `libertine`) and should provide partial compatibility with the obsolete `libertineotf` and `libertine-legacy` packages.

2 Installation

To install this package on a TDS-compliant \TeX system, unzip the file

```
/install/fonts/libertine.tds.zip
```

at the root of an appropriate `texmf` tree, likely a personal or local tree. If necessary, update the file-name database (e.g., `texhash`). Update the font-map files by enabling the Map file `libertine.map`.

3 Basic Usage

For most purposes, simply add

```
\usepackage{libertine}
```

to the preamble of your document. This will activate Libertine as the main (seriffed) text font and Biolinum as the sans font. To activate LibertineMono as the monospaced font, use the `mono` (or `tt`) option. It is recommended that the font encoding be set to T1 or LY1 but the default OT1 encoding is also supported. Available shapes in all series (except `tt`, which only has `it`) include:

<code>it</code>	italic
<code>sc</code>	small caps
<code>scit</code>	italic small caps

Slanted variants are not supported; the designed italic variants will be automatically substituted. The exceptions are the monospaced font and the bold series of Biolinum, for which designed italics are not currently available. Artificially slanted variants have been generated and treated as if they were italic.

To activate Libertine (without Biolinum), use the `libertine` (or `rm`) option. Similarly, to activate Biolinum (without Libertine) use the `biolinum` (or `sf` or `ss`) option. To use Biolinum as the main text font (as well as the sans font), use the option `sfdefault` (which redefines `\familydefault`, not `\rmdefault`).

4 Advanced Usage

Lua \TeX and xe \TeX users who might prefer to use type 1 fonts or who wish to avoid `fontspec` may use the `type1` (or `nofontspec`) option; `libertine-type1.sty` and `biolinum-type1.sty` wrapper packages are included to provide compatibility with the older packages. For legacy documents that use only basic facilities of `libertineotf`, a similar wrapper package `libertineotf.sty` is provided. The following features of the original `libertine` or `libertineotf` packages are *not* supported:

- font-features such as `Ligatures` or `Scale` as option parameters
- the `Outline` or `Shadow` fonts
- commands `\Lnnnum`, `\Lpnum`, `\Lcnum`, etc.
- environments `Ltable` and `libertineenumerate`

If your documents use any of the features listed above, you may have to continue to use the `libertineotf` package (which is still available from CTAN) or access the opentype fonts directly using `fontspec`.

The following options are available in all styles (except monospaced):

<code>oldstyle</code> (osf)	old-style figures
<code>lining</code> (nf, lf)	lining figures
<code>proportional</code> (p)	varying-width figures
<code>tabular</code> (t)	fixed-width figures

The defaults are `oldstyle` and `proportional`. These apply to both Libertine and Biolinum; to change the default figure style of just the Biolinum (sans) fonts, use options

`sflining` (`sflf`) or `sfoldstyle` (`sfosf`, `osfss`)

`sftabular` (`sft`) or `sfproportional` (`sfp`)

The `semibold` (`sb`) option will set `\bfdefault` to `sb` to allow using the semi-bold series of Libertine; this has no effect on the Biolinum fonts, for which there is no semi-bold variant. The options `scale=<number>` (or `scaled=<number>`) will scale the Biolinum fonts but have no effect on the Libertine fonts. Similarly, the options `ttscale=<number>` (or `ttscaled=<number>`) will scale the LibertineMono font.

Commands `\oldstylenums{...}` and `\oldstylenumsf{...}` are defined to allow for local use of old-style figures in Libertine and Biolinum, respectively, if lining figures is the default, and similarly `\liningnums{...}` and `\liningnumsf{...}`.

Similarly, commands `\tabularnums{...}` and `\tabularnumsf{...}` are defined to allow local use of monospaced figures in Libertine or Biolinum, respectively, if proportional figures is the default, and similarly `\proportionalnums{...}` and `\proportionalnumsf{...}`.

Superior numbers (for footnote markers) are available using `\sufigures` or `\textsu{...}`.

Macros `\libertine`, `\libertineSB`, `\libertineOsF`, `\libertineLF`, `\libertineDisplay` and `\libmono` select the Libertine family, the Libertine family with the semi-bold series as the `bfdefault`, the Libertine family with OldStyle figures, the Libertine family with Lining Figures, the Libertine Display font, and the LibertineMono family, respectively.

Macros `\biolinum`, `\biolinumOsF`, and `\biolinumLF` select the Biolinum family, the Biolinum family with OldStyle figures, and the Biolinum family with Lining Figures, respectively.

5 OpenType Fonts

The features in this section are only available to `xeLTEX` and `luaTEX` users.

Macros `\libertineGlyph{...}` and `\biolinumGlyph{...}` produce the glyph named in the argument in the Libertine or Biolinum font, respectively; for example, in regular-weight and upright-shape, `\libertineGlyph{seven.cap}` and `\libertineGlyph{uniE10F}` both produce a lining 7 that matches the height of capital letters, as in

K7L 3N6

Similarly, `\biolinumKeyGlyph{...}` produces the named glyph in the Biolinum Keyboard font; for example: `\biolinumKeyGlyph{seven}` produces [7]. A large number of macros of the form `\LKey...or \LMouse...` are provided to simplify production of glyphs in the Biolinum Keyboard font; see Appendix A. Appendix B has a table of the entire Linux Biolinum Keyboard font, with corresponding glyph name and codepoint.

Macro `\libertineInitialGlyph{...}` produces a glyph in the Libertine Initial font; Appendix C has a table of some of the glyphs and an example of how these glyphs may be used.

The fonts used for the features described above are in the `/fonts/opentype/public/libertine` directory as follows:

File name	Internal name	Description
<code>LinBiolinum_RB0.otf</code>	<code>LinBiolinum0B0</code>	sans serif bold italic (oblique)
<code>LinBiolinum_RB.otf</code>	<code>LinBiolinum0B</code>	sans serif bold
<code>LinBiolinum_RI.otf</code>	<code>LinBiolinum0I</code>	sans serif italic
<code>LinBiolinum_R.otf</code>	<code>LinBiolinum0</code>	sans serif regular
<code>LinLibertine RBI.otf</code>	<code>LinLibertine0BI</code>	bold italic
<code>LinLibertine_RB.otf</code>	<code>LinLibertine0B</code>	bold
<code>LinLibertine RI.otf</code>	<code>LinLibertine0I</code>	italic
<code>LinLibertine_R.otf</code>	<code>LinLibertine0</code>	regular
<code>LinLibertine RZI.otf</code>	<code>LinLibertine0ZI</code>	semibold italic
<code>LinLibertine_RZ.otf</code>	<code>LinLibertine0Z</code>	semibold
<code>LinLibertine_MBO.otf</code>	<code>LinLibertineMOB0</code>	mono bold italic (oblique)
<code>LinLibertine_MB.otf</code>	<code>LinLibertineMOB</code>	mono bold
<code>LinLibertine_M0.otf</code>	<code>LinLibertineMO0</code>	mono italic (oblique)
<code>LinLibertine_M.otf</code>	<code>LinLibertineMO</code>	mono
<code>LinBiolinum_K.otf</code>	<code>LinBiolinum0Kb</code>	keyboard
<code>LinLibertine_I.otf</code>	<code>LinLibertineIO</code>	decorative capitals
<code>LinLibertine_DR.otf</code>	<code>LinLibertineDisplay0</code>	a display (titling) font

6 Concluding Remarks

For compatible mathematics, it is recommended to use the `newtxmath` package with the `libertine` option.

The original opentype fonts were created by Philipp H. Poll (`gillian@linuxlibertine.org`) and are licensed under the terms of the GNU General Public License (Version 2, with font exception) and under the terms of the Open Font License. For details look into the `doc` directory of the distribution or at

`http://www.linuxlibertine.org/`

The Glyph and KeyCap support was adapted from the original `libertine` package by Michael Niedermair.

Three of the Libertine fonts were modified by Michael Sharpe (`msharpe@ucsd.edu`) using `fontforge` to correct minor problems, including adding three missing ligatures (`fl`, `ffl`, `ffi`) to the bold-italic font.

The type 1 fonts were created using `cfftot1` or `fontforge`. The internal font-family name of the type 1 fonts has been changed to `LinuxLibertineT` and `LinuxBiolinumT` to avoid interfering with `xeLTEX` users who access system fonts.

The support files were created using `autoinst`. The support files are licensed under the terms of the LaTeX Project Public License.

Thanks to Herbert Voss, Patrick Gundlach, Silke Hofstra, Marc Penninga, Michael Sharpe, Denis Bitouzé, and Khaled Hosny for their assistance. The maintainer of this package is Bob Tennent (`rdt@cs.queensu.ca`)

A Biolinum KeyCap Macros

A.1 Special Keys

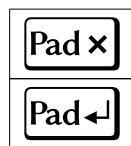
Tux	\LKeyTux	
Win	\LKeyWin	
Menu	\LKeyMenu	
Strg	\LKeyStrg	
Ctrl	\LKeyCtrl	
Alt	\LKeyAlt	
AltGr	\LKeyAltGr	
Shift	\LKeyShift	
Enter	\LKeyEnter	
Tab	\LKeyTab	
CapsLock	\LKeyCapsLock	
Pos	\LKeyPos	
Entf	\LKeyEntf	
Einf	\LKeyEinf	
Leer	\LKeyLeer	
Esc	\LKeyEsc	
Ende	\LKeyEnde	
Back	\LKeyBack	
Up	\LKeyUp	
Dwon	\LKeyDown	
Left	\LKeyLeft	

Right	\LKeyRight	
PgUp	\LKeyPgUp	
PgDown	\LKeyPgDown	
At	\LKeyAt	
Fn	\LKeyFn	
Home	\LKeyHome	
Del	\LKeyDel	
Space	\LKeySpace	
ScreenUp	\LKeyScreenUp	
ScreenDown	\LKeyScreenDown	
Ins	\LKeyIns	
End	\LKeyEnd	
GNU	\LKeyGNU	
PageUp	\LKeyPageUp	
PageDown	\LKeyPageDown	
Command	\LKeyCommand	
OptionKey	\LKeyOptionKey	
F1	\LKeyF{1}	
F2	\LKeyF{2}	
F3	\LKeyF{3}	
F4	\LKeyF{4}	
F5	\LKeyF{5}	
F6	\LKeyF{6}	

F7	\LKeyF{7}	
F8	\LKeyF{8}	
F9	\LKeyF{9}	
F10	\LKeyF{10}	
F11	\LKeyF{11}	
F12	\LKeyF{12}	
F13	\LKeyF{13}	
F14	\LKeyF{14}	
F15	\LKeyF{15}	
F16	\LKeyF{16}	
PADO	\LKeyPad{1}	
PAD1	\LKeyPad{1}	
PAD2	\LKeyPad{2}	
PAD3	\LKeyPad{3}	
PAD4	\LKeyPad{4}	
PAD5	\LKeyPad{5}	
PAD6	\LKeyPad{6}	
PAD7	\LKeyPad{7}	
PAD8	\LKeyPad{8}	
PAD9	\LKeyPad{9}	
PAD10	\LKeyPad{10}	
PAD11	\LKeyPad{11}	
PAD12	\LKeyPad{12}	

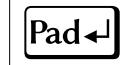
PAD13

\LKeyPad{13}



PAD14

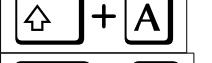
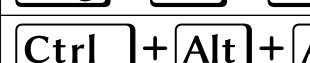
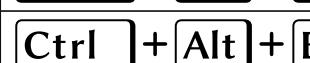
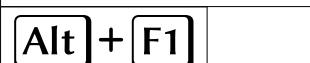
\LKeyPad{14}



A.2 General Keyboard

0	\LKey{zero}, \LKey{0}	
9	\LKey{nine}, \LKey{9}	
A	\LKey{A}	
Z	\LKey{Z}	

A.3 Keyboard Shortcuts

Strg-A	\LKeyStrgX{A}	
Ctrl-A	\LKeyCtrlX{A}	
Shift-A	\LKeyShiftX{A}	
Alt-A	\LKeyAltX{A}	
AltGr-A	\LKeyAltGrX{A}	
Shift-Strg-A	\LKeyShiftStrgX{A}	
Shift-Ctrl-A	\LKeyShiftCtrlX{A}	
Shift-Alt-A	\LKeyShiftAltX{A}	
Shift-AltGr-A	\LKeyShiftAltGrX{A}	
Strg-Alt-A	\LKeyStrgAltX{A}	
Strg-Alt-Entf	\LKeyStrgAltEnt	
Strg-Alt-Entf	\LKeyReset	
Ctrl-Alt-A	\LKeyCtrlAltX{A}	
Ctrl-Alt-Entf	\LKeyCtrlAltEnt	
Alt-F1	\LKeyAltF{1}	
Alt-F2	\LKeyAltF{2}	

Alt-F3	\LKeyAltF{3}	Alt + F3
Alt-F4	\LKeyAltF{4}	Alt + F4
Alt-F5	\LKeyAltF{5}	Alt + F5
Alt-F6	\LKeyAltF{6}	Alt + F6
Alt-F7	\LKeyAltF{7}	Alt + F7
Alt-F8	\LKeyAltF{8}	Alt + F8
Alt-F9	\LKeyAltF{9}	Alt + F9
Alt-F10	\LKeyAltF{10}	Alt + F10
Alt-F11	\LKeyAltF{11}	Alt + F11
Alt-F12	\LKeyAltF{12}	Alt + F12
Alt-F13	\LKeyAltF{13}	Alt + F13
Alt-F14	\LKeyAltF{14}	Alt + F14
Alt-F15	\LKeyAltF{15}	Alt + F15
Alt-F16	\LKeyAltF{16}	Alt + F16
Strg-Alt-F1	\LKeyStrgAltF{1}	Strg + Alt + F1
Strg-Alt-F2	\LKeyStrgAltF{2}	Strg + Alt + F2
Strg-Alt-F3	\LKeyStrgAltF{3}	Strg + Alt + F3
Strg-Alt-F4	\LKeyStrgAltF{4}	Strg + Alt + F4
Strg-Alt-F5	\LKeyStrgAltF{5}	Strg + Alt + F5
Strg-Alt-F6	\LKeyStrgAltF{6}	Strg + Alt + F6
Strg-Alt-F7	\LKeyStrgAltF{7}	Strg + Alt + F7
Strg-Alt-F8	\LKeyStrgAltF{8}	Strg + Alt + F8
Strg-Alt-F9	\LKeyStrgAltF{9}	Strg + Alt + F9

Strg-Alt-F10	\LKeyStrgAltF{10}	Strg + Alt + F10
Strg-Alt-F11	\LKeyStrgAltF{11}	Strg + Alt + F11
Strg-Alt-F12	\LKeyStrgAltF{12}	Strg + Alt + F12
Strg-Alt-F13	\LKeyStrgAltF{13}	Strg + Alt + F13
Strg-Alt-F14	\LKeyStrgAltF{14}	Strg + Alt + F14
Strg-Alt-F15	\LKeyStrgAltF{15}	Strg + Alt + F15
Strg-Alt-F16	\LKeyStrgAltF{16}	Strg + Alt + F16
Ctrl-Alt-F1	\LKeyCtrlAltF{1}	Ctrl + Alt + F1
Ctrl-Alt-F2	\LKeyCtrlAltF{2}	Ctrl + Alt + F2
Ctrl-Alt-F3	\LKeyCtrlAltF{3}	Ctrl + Alt + F3
Ctrl-Alt-F4	\LKeyCtrlAltF{4}	Ctrl + Alt + F4
Ctrl-Alt-F5	\LKeyCtrlAltF{5}	Ctrl + Alt + F5
Ctrl-Alt-F6	\LKeyCtrlAltF{6}	Ctrl + Alt + F6
Ctrl-Alt-F7	\LKeyCtrlAltF{7}	Ctrl + Alt + F7
Ctrl-Alt-F8	\LKeyCtrlAltF{8}	Ctrl + Alt + F8
Ctrl-Alt-F9	\LKeyCtrlAltF{9}	Ctrl + Alt + F9
Ctrl-Alt-F10	\LKeyCtrlAltF{10}	Ctrl + Alt + F10
Ctrl-Alt-F11	\LKeyCtrlAltF{11}	Ctrl + Alt + F11
Ctrl-Alt-F12	\LKeyCtrlAltF{12}	Ctrl + Alt + F12
Ctrl-Alt-F13	\LKeyCtrlAltF{13}	Ctrl + Alt + F13
Ctrl-Alt-F14	\LKeyCtrlAltF{14}	Ctrl + Alt + F14
Ctrl-Alt-F15	\LKeyCtrlAltF{15}	Ctrl + Alt + F15
Ctrl-Alt-F16	\LKeyCtrlAltF{16}	Ctrl + Alt + F16

A.4 Mouse Buttons (Three-Button Mice)

Empty	\LMouseEmpty	
No	\LMouseN	
Left	\LMouseL	
Middle	\LMouseM	
Right	\LMouseR	
LeftRight	\LMouseLR	

A.5 Mouse Buttons (Two-Button Mice)

Empty	\LMouseIIEmpty	
No	\LMouseIIN	
Left	\LMouseIIL	
Right	\LMouseIIR	
LeftRight	\LMouseIILR	

B Linux Biolinum Keyboard Glyphs

□	uni0020	□ *	asterisk
□	space	□ +	uni002B
! □	uni0021	□ +	plus
! □	exclam	□ ,	uni002C
" □	uni0022	□ ,	comma
" □	quotedbl	□ -	uni002D
# □	uni0023	□ -	hyphen
# □	numbersign	□ .	uni002E
\$ □	uni0024	□ .	period
\$ □	dollar	□ /	uni002F
% □	uni0025	□ /	slash
% □	percent	□ 0	uni0030
& □	uni0026	□ 0	zero
& □	ampersand	□ 1	uni0031
' □	uni0027	□ 1	one
' □	quotesingle	□ 2	uni0032
(□	uni0028	□ 2	two
(□	parenleft	□ 3	uni0033
) □	uni0029	□ 3	three
) □	parenright	□ 4	uni0034
* □	uni002A	□ 4	four

	uni0035		uni0040
	five		at
	uni0036		uni0041
	six		A
	uni0037		uni0042
	seven		B
	uni0038		uni0043
	eight		C
	uni0039		uni0044
	nine		D
	uni003A		uni0045
	colon		E
	uni003B		uni0046
	semicolon		F
	uni003C		uni0047
	less		G
	uni003D		uni0048
	equal		H
	uni003E		uni0049
	greater		I
	uni003F		uni004A
	question		J

	uni004B		uni0056
	K		V
	uni004C		uni0057
	L		W
	uni004D		uni0058
	M		X
	uni004E		uni0059
	N		Y
	uni004F		uni005A
	O		Z
	uni0050		uni005B
	P		bracketleft
	uni0051		uni005C
	Q		backslash
	uni0052		uni005D
	R		bracketright
	uni0053		uni005E
	S		asciicircum
	uni0054		uni005F
	T		underscore
	uni0055		uni0060
	U		grave

	uni0061		uni006C
	a		l
	uni0062		uni006D
	b		m
	uni0063		uni006E
	c		n
	uni0064		uni006F
	d		o
	uni0065		uni0070
	e		p
	uni0066		uni0071
	f		q
	uni0067		uni0072
	g		r
	uni0068		uni0073
	h		s
	uni0069		uni0074
	i		t
	uni006A		uni0075
	j		u
	uni006B		uni0076
	k		v

	uni0077		uni00A4
	w		currency
	uni0078		uni00A5
	x		yen
	uni0079		uni00A6
	y		brokenbar
	uni007A		uni00A7
	z		section
<td>uni007B</td> <td></td> <td>uni00A8</td>	uni007B		uni00A8
<td>braceleft</td> <td></td> <td>dieresis</td>	braceleft		dieresis
	uni007C		uni00AB
	bar		guillemotleft
<td>uni007D</td> <td></td> <td>uni00AD</td>	uni007D		uni00AD
<td>braceright</td> <td></td> <td>uni00B0</td>	braceright		uni00B0
	uni007E		degree
	asciitilde		uni00B1
	uni00A1		plusminus
	exclamdown		uni00B4
	uni00A2		acute
	cent		uni00B5
	uni00A3		uni00B7
	sterling		periodcentered

	uni00B8		uni00CA
	cedilla		Ecircumflex
	uni00BB		uni00CB
	guillemotright		Edieresis
	uni00C0		uni00CC
	Agrave		Igrave
	uni00C1		uni00CD
	Aacute		Iacute
	uni00C2		uni00CE
	Acircumflex		Icircumflex
	uni00C3		uni00CF
	Atilde		Idieresis
	uni00C4		uni00D0
	Adieresis		Eth
	uni00C5		uni00D1
	Aring		Ntilde
	uni00C7		uni00D2
	Ccedilla		Ograve
	uni00C8		uni00D3
	Egrave		Oacute
	uni00C9		uni00D4
	Eacute		Ocircumflex

Õ	uni00D5	à	uni00E0
Ӯ	Otilde	à	grave
Ӯ	uni00D6	á	uni00E1
Ӯ	Odieresis	á	aacute
×	uni00D7	â	uni00E2
×	multiply	â	acircumflex
Ø	uni00D8	ã	uni00E3
Ø	Oslash	ã	atilde
Ù	uni00D9	ä	uni00E4
Ù	Ugrave	ä	adieresis
Ú	uni00DA	å	uni00E5
Ú	Uacute	å	aring
Û	uni00DB	æ	uni00E6
Û	Ucircumflex	æ	ae
Ü	uni00DC	ç	uni00E7
Ü	Udieresis	ç	ccedilla
Ý	uni00DD	è	uni00E8
Ý	Yacute	è	egrave
Þ	uni00DE	é	uni00E9
Þ	Thorn	é	eacute
ß	uni00DF	ê	uni00EA
ß	germandbls	ê	ecircumflex

	uni00EB		uni00F6
	edieresis		odieresis
	uni00EC		uni00F7
	igrave		divide
	uni00ED		uni00F8
	iacute		oslash
	uni00EE		uni00F9
	icircumflex		ugrave
	uni00EF		uni00FA
	idieresis		uacute
	uni00F0		uni00FB
	eth		ucircumflex
	uni00F1		uni00FC
	ntilde		udieresis
	uni00F2		uni00FD
	ograve		yacute
	uni00F3		uni00FE
	oacute		thorn
	uni00F4		uni00FF
	ocircumflex		ydieresis
	uni00F5		uni0100
	otilde		Amacron

	uni0101		uni010C
	amacron		Ccaron
	uni0102		uni010D
	Abreve		ccaron
	uni0103		uni010E
	abreve		Dcaron
	uni0104		uni010F
	Aogonek		dcaron
	uni0105		uni0110
	aogonek		Dcroat
	uni0106		uni0111
	Cacute		dcroat
	uni0107		uni0112
	cacute		Emacron
	uni0108		uni0113
	Ccircumflex		emacron
	uni0109		uni0114
	ccircumflex		Ebreve
	uni010A		uni0115
	Cdotaccent		ebreve
	uni010B		uni0116
	cdotaccent		Edotaccent

	uni0117		uni0122
	edotaccent		Gcommaaccent
	uni0118		uni0123
	Eogonek		gcommaaccent
	uni0119		uni0124
	eogonek		Hcircumflex
	uni011A		uni0125
	Ecaron		hcircumflex
	uni011B		uni0126
	ecaron		Hbar
	uni011C		uni0127
	Gcircumflex		hbar
	uni011D		uni0128
	gcircumflex		Itilde
	uni011E		uni0129
	Gbreve		itilde
	uni011F		uni012A
	gbreve		Imacron
	uni0120		uni012B
	Gdotaccent		imacron
	uni0121		uni012C
	gdotaccent		Ibreve

	uni012D		uni0138
	ibreve		kgreenlandic
	uni012E		uni0139
	Iogonek		Lacute
	uni012F		uni013A
	iogonek		lacute
	uni0130		uni013B
	Idotaccent		Lcommaaccent
	uni0131		uni013C
	dotlessi		lcommaaccent
	uni0132		uni013D
	IJ		Lcaron
	uni0133		uni013E
	ij		lcaron
	uni0134		uni013F
	Jcircumflex		Ldot
	uni0135		uni0140
	jcircumflex		ldot
	uni0136		uni0141
	Kcommaaccent		Lslash
	uni0137		uni0142
	kcommaaccent		lslash

	uni0143		uni0150
	Nacute		Ohungarumlaut
	uni0144		uni0151
	nacute		ohungarumlaut
	uni0145		uni0154
	Ncommaaccent		Racute
	uni0146		uni0155
	ncommaaccent		racute
	uni0147		uni0156
	Ncaron		Rcommaaccent
	uni0148		uni0157
	ncaron		rcommaaccent
	uni0149		uni0158
	napostrophe		Rcaron
	uni014C		uni0159
	Omacron		rcaron
	uni014D		uni015A
	omacron		Sacute
	uni014E		uni015B
	Obreve		sacute
	uni014F		uni015C
	obreve		Scircumflex

	uni015D		uni0168
	scircumflex		Utilde
	uni015E		uni0169
	Scedilla		utilde
	uni015F		uni016A
	scedilla		Umacron
	uni0160		uni016B
	Scaron		umacron
	uni0161		uni016C
	scaron		Ubreve
	uni0162		uni016D
	Tcedilla		ubreve
	uni0163		uni016E
	tcedilla		Uring
	uni0164		uni016F
	Tcaron		uring
	uni0165		uni0170
	tcaron		Uhungarumlaut
	uni0166		uni0171
	Tbar		uhungarumlaut
	uni0167		uni0172
	tbar		Uogonek

	uni0173		uni017E
	uogonek		zcaron
	uni0174		uni02B0
	Wcircumflex		h.superior
	uni0175		uni02B1
	wcircumflex		hhook.superior
	uni0176		uni02B2
	Ycircumflex		j.superior
	uni0177		uni02B3
	ycircumflex		r.superior
	uni0178		uni02B4
	Ydieresis		rturned.superior
	uni0179		uni02B5
	Zacute		rhookturned.superior
	uni017A		uni02B6
	zacute		Rsmallinverted.superior
	uni017B		uni02B7
	Zdotaccent		w.superior
	uni017C		uni02B8
	zdotaccent		y.superior
	uni017D		uni02B9
	Zcaron		uni02BA
			uni02BB

,	uni02BC	,	uni02CF
,	afii57929	,	uni02D0
'	uni02BD	'	uni02D1
'	afii64937	'	uni02D2
)	uni02BE	c	uni02D3
c	uni02BF	+	uni02D4
?	uni02C0	?	uni02D5
ˇ	uni02C1	+	uni02D6
<	uni02C2	-	uni02D7
>	uni02C3	v	uni02D8
^	uni02C4	v	breve
v	uni02C5	•	uni02D9
^	uni02C6	•	dotaccent
^	circumflex	◦	uni02DA
ˇ	uni02C7	◦	ring
ˇ	caron	č	uni02DB
ı	uni02C8	č	ogonek
-	uni02C9	~	uni02DC
'	uni02CA	~	tilde
`	uni02CB	"	uni02DD
I	uni02CC	"	hungarumlaut
-	uni02CD	~	uni02DE
~	uni02CE	x	uni02DF

ꝑ	uni02E0	ꝑ	uni0307
ꝑ	gammalatin.superior	ꝑ	uni0308
ꝑ	uni02E1	ꝑ	uni0309
ꝑ	l.superior	ꝑ	hookabovecomb
ꝑ	uni02E2	ꝑ	uni030A
ꝑ	s.superior	ꝑ	uni030B
ꝑ	uni02E3	ꝑ	uni030C
ꝑ	x.superior	ꝑ	uni030D
ꝑ	uni02E4	ꝑ	uni030E
ꝑ	glottalstopreversed.superior	ꝑ	uni030F
ꝑ	uni02EC	ꝑ	uni0310
ꝑ	uni02ED	ꝑ	uni0311
ꝑ	uni02EE	ꝑ	uni0312
ꝑ	uni0300	ꝑ	uni0313
ꝑ	gravecomb	ꝑ	uni0314
ꝑ	uni0301	ꝑ	uni0315
ꝑ	acutecomb	ꝑ	uni0316
ꝑ	uni0302	ꝑ	uni0317
ꝑ	uni0303	ꝑ	uni0318
ꝑ	tildecomb	ꝑ	uni0319
ꝑ	uni0304	ꝑ	uni031A
ꝑ	uni0305	ꝑ	uni031B
ꝑ	uni0306	ꝑ	uni031C

𠂇	uni031D	𠂈	uni0342
𠂉	uni031E	𠂊	uni0343
𠂋	uni031F	𠂌	uni0351
𠂌	uni0320	𠂍	uni0357
𠂎	uni0321	𠂏	uni0358
𠂏	uni0322	𠂐	uni0359
𠂑	uni0323	𠂑	uni035A
𠂒	dotbelowcomb	𠂒	uni035B
𠂔	uni0324	𠂔	uni035C
𠂕	uni0325	𠂕	uni035D
𠂖	uni0326	𠂖	uni035E
𠂗	uni0327	𠂗	uni035F
𠂘	uni0328	𠂘	uni0360
𠂙	uni0329	𠂙	uni0361
𠂚	uni032A	𠂚	uni0362
𠂛	uni032B	𠂛	uni0363
𠂜	uni032C	𠂜	uni0374
𠂝	uni032D	𠂝	uni0375
𠂞	uni032E	𠂞	uni05B0
𠂟	uni032F	𠂟	afii57799
𠂢	uni0330	𠂢:	uni05B1
𠂣	uni0331	𠂣:	afii57801
𠂥	uni0338	𠂥:	uni05B2

□:	afii57800	□	afii57645
□:	uni05B3	□	uni05BF
□:	afii57802	□	afii57841
□	uni05B4	□	uni05C0
□	afii57793	□	afii57842
□	uni05B5	□	uni05C1
□	afii57794	□	afii57804
□	uni05B6	□	uni05C2
□	afii57795	□	afii57803
□	uni05B7	□	uni05C3
□	afii57798	□	afii57658
□	uni05B8	□	uni05C6
□	afii57797	□	uni05D0
□	uni05B9	□	afii57664
□	afii57806	□	uni05D1
□	uni05BA	□	afii57665
□	uni05BB	□	uni05D2
□	afii57796	□	afii57666
□	uni05BC	□	uni05D3
□	afii57807	□	afii57667
□	uni05BD	□	uni05D4
□	afii57839	□	afii57668
□	uni05BE	□	uni05D5

	afii57669		afii57680
	uni05D6		uni05E1
	afii57670		afii57681
	uni05D7		uni05E2
	afii57671		afii57682
	uni05D8		uni05E3
	afii57672		afii57683
	uni05D9		uni05E4
	afii57673		afii57684
	uni05DA		uni05E5
	afii57674		afii57685
	uni05DB		uni05E6
	afii57675		afii57686
	uni05DC		uni05E7
	afii57676		afii57687
	uni05DD		uni05E8
	afii57677		afii57688
	uni05DE		uni05E9
	afii57678		afii57689
	uni05DF		uni05EA
	afii57679		afii57690
	uni05E0		uni05F0

	afii57716		uni21A5
	uni05F1		uni21A7
	afii57717		uni21BC
	uni05F2		uni21BD
	afii57718		uni21C0
	uni2190		uni21C1
	arrowleft		uni21D0
	uni2191		arrowdblleft
	arrowup		uni21D1
	uni2192		arrowdblup
	arrowright		uni21D2
	uni2193		arrowdblright
	arrowdown		uni21D3
	uni2194		arrowdbldown
	arrowboth		uni21D4
	uni2195		arrowdblboth
	arrowupdn		uni21D5
	uni2196		uni21D6
	uni2197		Narrow
	uni2198		uni21D7
	uni2199		Nearrow
	uni219A		uni21D8
	uni219B		Searrow

	uni21D9		uni25C1
	Swarro		uni25C6
	uni2318		uni25C7
	uni2325		uni25C9
	uni2326		uni25CA
	uni2327		lozengे
	uni232B		uni25CB
	uni237D		circle
	uni2380		uni25CE
	uni2423		uni25CF
	uni25A0		H18533
	filledbox		uni25D0
	uni25A1		uni25D1
	H22073		uni25D2
	uni25B2		uni25D3
	triagup		uni25D4
	uni25B3		uni25D5
	uni25B6		uni25D6
	uni25B7		uni25D7
	uni25BC		uni25E6
	triagdn		openbullet
	uni25BD		uni2605
	uni25C0		uni2619

	uni261B		uni264A
	uni261E		uni264B
	uni2627		uni264C
	uni262F		uni264D
	uni2639		uni264E
	uni263A		uni264F
	uni263B		uni2650
	uni263C		uni2651
	uni263D		uni2652
	uni263E		uni2653
	uni263F		uni2660
	uni2640		uni2663
	female		uni2665
	uni2641		uni2666
	uni2642		uni2669
	male		uni266A
	uni2643		musicalnote
	uni2644		uni266B
	uni2645		musicalnotedbl
	uni2646		uni266C
	uni2647		uni2695
	uni2648		uni2698
	uni2649		uni26A2

	uni26A3		uniE132
	uni26A4		uniE133
	uni26A5		uniE134
	uni26AD		uniE135
	uni2767		uniE138
	uni2776		uniE139
	uni2777		uniE13A
	uni2778		uniE13C
	uni2779		uniE13D
	uni277A		uniE168
	uni277B		uniE16E
	uni277C		B_a_c_k
	uni277D		uniE170
	uni277E		S_t_r_g
	uni277F		uniE171
	uniE000		A_l_t
	T_u_x		uniE172
	uniE104		A_l_t_G_r
	uniE128		uniE173
	uniE129		C_t_r_l
	uniE12A		uniE174
	uniE130		S_h_i_f_t
	uniE131		

	uniE175		uniE180
	T_a_b		F_9
	uniE176		uniE181
	E_n_t_e_r		F_1_0
	uniE177		uniE182
	C_a_p_s_l_o_c_k		F_1_1
	uniE178		uniE183
	F_1		F_1_2
	uniE179		uniE184
	F_2		F_1_3
	uniE17A		uniE185
	F_3		F_1_4
	uniE17B		uniE186
	F_4		F_1_5
	uniE17C		uniE187
	F_5		F_1_6
	uniE17D		uniE188
	F_6		uniE189
	uniE17E		H_o_m_e
	F_7		uniE18A
	uniE17F		D_e_l
	F_8		uniE18B

	I_n_s		uniE1A0
	uniE18C		uniE1A1
	uniE18E		uniE1A2
	E_n_d		uniE1A3
	uniE190		uniE1A4
	G_N_U		uniE1A5
	uniE191		uniE1A6
	P_o_s_1		uniE1A7
	uniE192		uniE1A8
	E_n_t_f		uniE1A9
	uniE193		uniE1AA
	E_i_n_f		uniE1AB
	uniE194		uniE1AC
	L_e_e_r		uniE1AD
	uniE195		uniE1AE
	E_s_c		uniE1B0
	uniE196		uniE1B1
	E_n_d_e		uniE358
	uniE198		grave.cap
	uniE199		acute.cap
	uniE19A		uniE35A
	uniE19B		circumflex.cap

▀	uniE35B	▀	uniE360
▀	caron.cap	▀	breve.cyrcap
▀	uniE35C	▀	uniE361
▀	breve.cap	▀	breve.cyr
▀	uniE35D	▀	uniE362
▀	hungarumlaut.cap	▀	dieresis.cap
▀	uniE35E	▀	uniE363
▀	space_uni030F.cap	▀	hookabovecomb.cap
▀	uniE35F	▀	uniFFFFD
▀	breveinvertedcmb.cap	▀	

C The Linux Libertine Initial Font

C.1 A Selection of Glyphs

0	zero	9	nine	I	I	R	R
1	one	A	A	J	J	S	S
2	two	B	B	K	K	T	T
3	three	C	C	L	L	U	U
4	four	D	D	M	M	V	V
5	five	E	E	N	N	W	W
6	six	F	F	O	O	X	X
7	seven	G	G	P	P	Y	Y
8	eight	H	H	Q	Q	Z	Z

C.2 An Example

LOREM ipsum dolor sit amet, consectetuer adipiscing elit. Ut purus elit, vestibulum ut, placerat ac, adipiscing vitae, felis. Curabitur dictum gravida mauris. Nam arcu libero, nonummy eget, consectetuer id, vulputate a, magna. Donec vehicula augue eu neque. Pellentesque habitant morbi tristique senectus et netus et malesuada fames ac turpis egestas. Mauris ut leo. Cras viverra metus rhoncus sem. Nulla et lectus vestibulum urna fringilla ultrices. Phasellus eu tellus sit amet tortor gravida placerat. Integer sapien est, iaculis in, pretium quis, viverra ac, nunc. Praesent eget sem vel leo ultrices bibendum. Aenean faucibus. Morbi dolor nulla, malesuada eu, pulvinar at, mollis ac, nulla. Curabitur auctor semper nulla. Donec varius orci eget risus. Duis nibh mi, congue eu, accumsan eleifend, sagittis quis, diam. Duis eget orci sit amet orci dignissim rutrum.

NAM dui ligula, fringilla a, euismod sodales, sollicitudin vel, wisi. Morbi auctor lorem non justo. Nam lacus libero, pretium at, lobortis vitae, ultricies et, tellus. Donec aliquet, tortor sed accumsan bibendum, erat ligula aliquet magna, vitae ornare odio metus a mi. Morbi ac orci et nisl hendrerit mollis. Suspendisse ut massa. Cras nec ante. Pellentesque a nulla. Cum sociis natoque penatibus et magnis dis parturient montes, nascetur ridiculus mus. Aliquam tincidunt urna. Nulla ullamcorper vestibulum turpis. Pellentesque cursus luctus mauris.