

Family	Series	Shapes	Typeface Examples
<i>Computer Modern Roman</i> (Encodings: T1, TS1, OT1)			
cmr	m	n, it, sl, sc, ui	Computer Modern Roman, <i>italic</i> , <i>slanted</i> , and SMALL CAPS
	bx	n, it, sl, sc	bold extended , <i>italic</i> , <i>slanted</i> , and SMALL CAPS
	b	n	bold medium width (no other shapes)
<i>Computer Modern Sans</i> (Encodings: T1, TS1, OT1)			
cmss	m, bx	n, (it), sl	Computer Modern Sans bold extended , <i>italic</i> , and <i>slanted</i>
	sbc	n	Computer Modern Sans semibold condensed (no shape variants)
<i>Computer Modern Typewriter</i> (Encodings: T1, TS1, OT1)			
cmtt	m	n, it, sl, sc	Comp. Mod. Typewriter, <i>italic</i> , <i>slanted</i> and SMALL CAPS
cmvtt	m	n, it	Comp. Mod. Typewriter proportional upright and italics
<i>Computer Modern Fibonacci</i> (Encodings: T1, OT1)			
cmfib	m	n	Computer Modern Fibonacci
<i>Computer Modern Dunhill</i> (Encodings: T1, OT1)			
cmdh	m	n	Computer Modern Dunhill

Values in blue are not or only partly offered in OT1 encoding!

Table 9.5: Classification of the Computer Modern font families

It is followed by a discussion of \LaTeX 's standard support packages for input and font encodings including a discussion of how to use an extended set of text symbols. The section concludes by describing a package for tracing \LaTeX 's font processing and another package for displaying glyph charts (a package the author used extensively while preparing the later parts of this chapter).

9.5.1 Computer Modern, Latin Modern — The \LaTeX standard fonts

Original \TeX font encoding

Along with \TeX , Donald Knuth developed a family of fonts called Computer Modern; see Table 9.5. Until the early 1990s, essentially only these fonts were usable with \TeX and, consequently, with \LaTeX . Each of them contains 128 glyphs (\TeX was working with 7 bits originally), which does not leave room for including accented characters as individual glyphs. Thus, using these fonts means that accented characters have to be produced with the `\accent` primitive of \TeX , which in turn means that automatic hyphenation of words with accented characters is impossible. While this restriction is acceptable for English documents that contain few foreign words, it is a major obstacle for other languages.

Not surprisingly, these deficiencies were of great concern to the \TeX users in Europe and eventually led to a reimplementa-tion of \TeX in 1989 to support 8-bit

Family	Series	Shapes	Typeface Examples
<i>Latin Modern Roman</i>		Latin Modern Roman Latin Modern Roman Caps	(Encodings: T1, TS1, OT1, T5, LY1, and TU)
lmr	m	n, it, sl, sc, scsl , ui	Latin Modern Roman upright, <i>italic</i> , <i>slanted</i> , SMALL CAPS and <i>SMALL CAPS SLANTED</i>
	bx	n, it, sl	Latin Modern bold extend, <i>italic</i> , and <i>slanted</i>
	b	n, (<i>it</i>), sl	Latin Modern bold <i>and slanted</i>
<i>Latin Modern Sans</i>		Latin Modern Sans	(Encodings: T1, TS1, OT1, T5, LY1, and TU)
lmss	m	n, (<i>it</i>), sl	Latin Modern Sans upright and <i>slanted</i>
	(b), bx, sbc	n, (<i>it</i>), sl	Latin Modern Sans bold extended <i>and slanted</i> , and semibold condensed <i>and slanted</i>
<i>Latin Modern Typewriter</i>		Latin Modern Mono	(Encodings: T1, TS1, OT1, T5, LY1, and TU)
lmtt	m	n, it, sl, sc, scsl	Latin Modern Typewriter upright, <i>italic</i> , <i>slanted</i> , SMALL CAPS and <i>SMALL CAPS SLANTED</i>
	l , lc , b , (bx)	n, (<i>it</i>), sl	Latin Modern Typewriter light, <i>slanted</i> , and light condensed, <i>slanted</i> , bold and bold slanted
<i>Proportional Latin Modern Typewriter</i>		Latin Modern Mono Prop	(Encodings: T1, TS1, OT1, T5, LY1, and TU)
lmttt	m	n, (<i>it</i>), sl	Latin Modern Typewriter proportional <i>and slanted</i>
	l , b , (bx)	n, (<i>it</i>), sl	Latin Modern Typewriter light, <i>light slanted</i> , bold and bold slanted
<i>Latin Modern Dunhill</i>		Latin Modern Roman Dunhill	(Encodings: T1, TS1, OT1, T5, LY1, and TU)
cmdh	m	n, (<i>it</i>), sl	Latin Modern Dunhill upright <i>and slanted</i>

Shapes or series value colored in blue are additions in the Latin Modern family not available in the Computer Modern. Values given in parentheses indicate substitutions; e.g., (*it*) produces **sl**, and (**b**) becomes **bx**, or vice versa. Note that the CM proportional typewriter has an **it** shape while the LM proportional typewriter has an **sl** shape instead. The font names with gray background are for use with the fontspec package in Unicode engines.

Table 9.6: Classification of the Latin Modern font families

additional shapes and weights were added [171]. In particular, there are now bold and light versions of the typewriter fonts that can be useful in certain situations.

However, without accompanying math fonts, they were not yet a full-fledged alternative to Computer Modern or European Modern fonts. This changed in 2011 with the release of the Latin Modern Math fonts. Additionally, all fonts in the Latin Modern families were made available in OpenType font format, which made them available to be used in Unicode T_EX engines (or even Word, if so desired).

Unicode engines

In fact, they are now L^AT_EX's default fonts if you typeset using X_YL^AT_EX or LuaT_EX.