

The STEP fonts

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The STEP fonts are a free Times-like (i.e., Times replacement) font family, implementing a design first created for *The Times* of London in 1932. These fonts are meant to be compatible in design with Adobe’s digitization of Linotype Times, commonly used in publishing. Linotype’s Times design is similar, but not exactly identical to Monotype’s Times New Roman. STEP is an acronym which can intentionally have multiple meanings, its primary meaning is *Serif Typeface for Electronic Publishing*.

I History

The STEP fonts are based on the (original) STIX¹ and XITS² fonts. The core character set came from STIX; Khaled Hosny made some improvements and fixes in XITS. Other improvements were made by myself in upstream XITS. STEP, unlike XITS, does not hold itself to the goal of strict backwards compatibility. STEP’s math fonts (available in OpenType format only at present) are almost unchanged from XITS’. STEP changes vertical metrics from XITS (mostly useful for non- \TeX applications) to match those of Adobe’s Linotype Times. Further, for text fonts, STEP supports the Type 1 format and includes support for use with \LaTeX , although more features remain available in OpenType only.

2 Why STEP?

The STEP fonts are far from the only free digitization of Times available for use with \LaTeX . It does, however, provide some features not found in other commonly-used fonts. Unlike

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¹<https://ctan.org/pkg/stix>

²<https://github.com/alif-type/xits>

\TeX Gyre Termes, it has small capitals and old-style figures which were manually drawn instead of scaled (semi-)automatically, ensuring higher quality; other Times fonts available often do not include small capitals or old-style figures at all. STEP also includes superior and inferior figures. The utmost care has been taken to ensure that all characters in STEP are of high quality.

Still, STEP does not work for all situations; it does not support Greek or Cyrillic well (both are found in the OpenType versions, but missing kerning, and the Greek font in particular is suited only to mathematics and not Greek text). For Greek text, it is recommended that you use a different package; a Greek text font may be created to accompany STEP in the future. STEP's character support for certain other languages which use the Latin alphabet is also lacking, and improvements are planned for the future.

3 Usage with fontspec

If you do not need to use a legacy \TeX engine, simply use fontspec³ as follows:

```
\usepackage{fontspec}  
\setmainfont{STEP}
```

If you wish to use the math font as well, this is possible:

```
\usepackage{unicode-math}  
\setmathfont{STEP Math}
```

When using fontspec, all font options are handled according to that package's facilities. See its documentation for details.

4 Usage with the step \LaTeX package

To use the STEP fonts in older \TeX engines, you may use the \LaTeX package step.

```
\usepackage{step}
```

Do remember that it is usually wise to load fontenc with the appropriate encoding(s). The \LaTeX package does not include support for any math fonts; I recommend that you use STIX's math fonts instead with `\usepackage[notext]{stix}`.

³<https://ctan.org/pkg/fontspec>

4.1 Package Options

Package Option	Feature
<code>lining</code>	Use lining figures (default) 1234567890
<code>oldstyle</code>	Use old-style figures 1234567890

4.2 Text Commands

Text Command	Feature
<code>\lining{}</code>	Use lining figures 1234567890
<code>\oldstyle{}</code>	Use old-style figures 1234567890
<code>\textsc{}</code>	Use small caps (regular font only) ABCDE\$&
<code>\textsu{}</code>	Use superior figures 1234567890
<code>\textin{}</code>	Use inferior figures 1234567890

5 Contributing

Contributions to the fonts themselves may be sent as pull requests to their GitHub repository.⁴ Contributions to the L^AT_EX support should be emailed directly to me for inclusion (with credit, of course).

6 Licensing

STEP is licensed under the Open Font License (OFL) version 1.1; see STEP-COPYING for details.

7 Known Issues

The L^AT_EX package as of now inserts ligatures in small capitals by default even when they don't belong; e.g., OFFER. V can be used to break these up for the moment (OFFER). A fix is planned for the next release.

⁴<https://github.com/dbenjaminmiller/step>