The stix package

v1.1.0-latex-beta from 2012/12/23

Contents

1 Introduction

The mission of the *Scientific and Technical Information Exchange (STIX)* font creation project is the preparation of a comprehensive set of fonts that serve the scientific and engineering community in the process from manuscript creation through final publication, both in electronic and print formats. Toward this purpose, the STIX fonts will be made available, under royalty-free license, to anyone, including publishers, software developers, scientists, students, and the general public.

The STIX fonts are based on the Unicode standard for character representation.

Not all Unicode values are included in the STIX Fonts, but there is extensive coverage of Latin alphabets, Greek, and Cyrillic. The Font contents were assembled from a list of every character/glyph required for publication in the journals of the participating STI Pub companies. Every scientific discipline is represented in this list, as well as many other fields from the arts and humanities.

Most of the glyphs in the STIX Fonts have been designed in Times-compatible style.

The stix package provides LaTeX support for using STIX fonts in both text and math. The text fonts are provided in both `T1` (default) and `OT1` encodings, as well as `TS1` symbol font encoding, which cover only a subset of Latin characters supported by STIX fonts.

The math support covers nearly every mathematical symbol in STIX fonts, around 2400 symbols in 11 regular fonts, in addition to around 1950 symbols in 10 bold fonts. Section 3 list math alphabets supported by the stix, while section 4 lists all defined math symbols.

There are also three fonts containing extra miscellaneous symbols, `stix-extra1`, `stix-extra2` and `stix-extra3`, provided as TFM and PFB files without support from the macro package.

2 Usage

Using STIX fonts with LaTeX is as simple as loading stix package:

```
\documentclass{article}
\usepackage{stix}
\begin{document}
Some text, and a math formula \(a+b=\sqrt{c}\).
\end{document}
```

2.1 Options

`notext` Do not change the default text fonts.

`nomath` Do not change the default math fonts.

`not1` Do not change the default font encoding to `T1`.

`notextcomp` Do not load the textcomp package (provides symbols and oldstyle figures from `TS1` encoding to be used with `T1` encoded text fonts).

`lcgreekalpha` By default lower case Greek, partial differential and Nabla are given `\mathord` class which makes them insensitive to math alphabet changes (i.e. `$\mathbf{\beta}$` gives β instead of $\mathbf{\beta}$), with this option they will be given `\mathalpha` class just like Latin and upper case Greek.

`upint` Use upright integrals by default ($\int$ instead of $\int$). See Section 4.6 on page 18 for more details.

2.2 Compatibility with other packages

amsmath

The stix package should be used with at least amsmath v2.14, amssymb v3.01 and amsfonts v3.01.

With amsmath v2.14 or newer, it is recommended to load it (and/or packages that load it) *after* stix package. Older versions of amsmath must be loaded *before* stix package, otherwise errors will arise.

The following amsmath options affect not only symbols known to amsmath, but also new symbols defined by the stix pakage: `sumlimits`, `nosumlimits`, `intlimits` and `nointlimits`.

3 Math alphabets

The following table list math alphabets defined by the stix with the Unicode ranges they cover:

	A-Z	a-z	Γ-Ω	α-ω	0-9
\mathrm	00041-0005A	00061-0007A	00393-003A9	003B1-003C9	00030-00039
\mathbf	1D400-1D419	1D41A-1D433	1D6AA-1D6C0	1D6C2-1D6DA	1D7CE-1D7D7
\mathit	1D434-1D44D	1D44E-1D467	1D6E4-1D6FA	1D6FC-1D714	-
\mathbfit	1D468-1D481	1D482-1D49B	1D71E-1D734	1D736-1D74E	-
\mathcal	•	-	-	-	-
\mathscr	1D49C-1D4B5	1D4B6-1D4CF	-	-	-
\mathbfscr	1D4D0-1D4E9	1D4EA-1D503	-	-	-
\mathsf	1D5A0-1D5B9	1D5BA-1D5D3	•	•	1D7E2-1D7EB
\mathbfsf	1D5D4-1D5ED	1D5EE-1D607	1D758-1D76E	1D770-1D788	1D7EC-1D7F5
\mathsfit	1D608-1D621	1D622-1D63B	•	•	-
\mathbfsfit	1D63C-1D655	1D656-1D66F	1D792-1D7A8	1D7AA-1D7C2	-
\mathbb	1D538-1D551	1D552-1D56B	-	-	1D7D8-1D7E1
\mathbfbb	•	•	-	-	-
\mathbbit	•	•	-	-	-
\mathbfbbit	•	•	-	-	-
\mathfrak	1D504-1D51D	1D51E-1D537	-	-	-
\mathbffrak	1D56C-1D585	1D586-1D59F	-	-	-
\mathtt	1D670-1D689	1D68A-1D6A3	-	-	1D7F6-1D7FF

• Covered by STIX fonts but not in Unicode.
- Not covered.

TEX allows only 16 math alphabets to be used simultaneously, so not all of these alphabets can be used in one document. When stix is loaded, 10 math groups are allocated, with the following math alphabets available by default:

- `\mathrm`
- `\mathit`
- `\mathsf`
- `\mathsfit`
- `\mathcal`
- `\mathscr`
- `\mathfrak`
- `\mathbb`
- `\mathbbit`

This leaves room for 6 other alphabets to be allocated on demand when any of the other alphabets is used.

4 Math symbols

The following section lists all math symbols defined by stix package. Symbols with * next to their name do not have a bold version, wheb \boldmathis active, the non-bold glyph will be used.

4.1 Alphabetics

Γ	U+0393	\Gamma
Δ	U+0394	\Delta
Θ	U+0398	\Theta
Λ	U+039B	\Lambda
Ξ	U+039E	\Xi
Π	U+03A0	\Pi
Σ	U+03A3	\Sigma
Υ	U+03A5	\Upsilon
Φ	U+03A6	\Phi
Ψ	U+03A8	\Psi
Ω	U+03A9	\Omega
α	U+03B1	\alpha
β	U+03B2	\beta
γ	U+03B3	\gamma
δ	U+03B4	\delta
ϵ	U+03B5	\epsilon
ζ	U+03B6	\zeta
η	U+03B7	\eta
θ	U+03B8	\theta
ι	U+03B9	\iota
κ	U+03BA	\kappa
λ	U+03BB	\lambda
μ	U+03BC	\mu
ν	U+03BD	\nu
ξ	U+03BE	\xi
π	U+03C0	\pi
ρ	U+03C1	\rho
σ	U+03C3	\sigma
τ	U+03C4	\tau
υ	U+03C5	\upsilon
ϕ	U+03D5	\phi
χ	U+03C7	\chi
ψ	U+03C8	\psi
ω	U+03C9	\omega
ε	U+03F5	\varepsilon
ϑ	U+03D1	\vartheta
ϖ	U+03D6	\varpi
ϱ	U+03F1	\varrho
ς	U+03C2	\varsigma
φ	U+03C6	\varphi
∇	U+2207	\nabla
∂	U+2202	\partial
$\imath$	U+1D6A4	\imath
$\jmath$	U+1D6A5	\jmath

4.2 Ordinary symbols

#	U+0023	\#
$	U+0024	\mathdollar
%	U+0025	\%
&	U+0026	\&
.	U+002E	.
/	U+002F	/
?	U+003F	?
@	U+0040	@
\	U+005C	\backslash
£	U+00A3	\mathsterling
§	U+00A7	\mathsection
¬	U+00AC	\neg, \lnot
¶	U+00B6	\mathparagraph
ð	U+00F0	\eth
Ƶ	U+01B5	\Zbar*
ϝ	U+03DD	\digamma
ϰ	U+03F0	\varkappa
϶	U+03F6	\backepsilon
϶	U+03F6	\upbackepsilon
..	U+2025	\enleadertwodots
…	U+2026	\mathellipsis
′	U+2032	\prime
″	U+2033	\dprime
‴	U+2034	\trprime
‵	U+2035	\backprime
‶	U+2036	\backdprime

‵‵‵ U+2037 \backtrprime
‸ U+2038 \caretinsert
‼ U+203C \Exclam
⁃ U+2043 \hyphenbullet*
⁇ U+2047 \Question
⁗ U+2057 \qprime
◯ U+20DD \enclosecircle
□ U+20DE \enclosesquare*
◇ U+20DF \enclosediamond*
△ U+20E4 \enclosetriangle
ℇ U+2107 \Eulerconst
ℏ U+210F \hbar*
ℏ U+210F \hslash
ℑ U+2111 \Im
ℓ U+2113 \ell
℘ U+2118 \wp
ℜ U+211C \Re
℧ U+2127 \mho
℩ U+2129 \turnediota
Å U+212B \Angstrom
Ⅎ U+2132 \Finv
ℵ U+2135 \aleph
ℶ U+2136 \beth
ℷ U+2137 \gimel
ℸ U+2138 \daleth
⅁ U+2141 \Game*
⅂ U+2142 \sansLturned*
⅃ U+2143 \sansLmirrored*
⅄ U+2144 \Yup*
⅊ U+214A \PropertyLine*
↕ U+21A8 \updownarrowbar
↴ U+21B4 \linefeed
↵ U+21B5 \carriagereturn
↸ U+21B8 \barovernorthwestarrow
↹ U+21B9 \barleftarrowrightarrowbar
↺ U+21BA \acwopencirclearrow
↻ U+21BB \cwopencirclearrow
⇞ U+21DE \nHuparrow*
⇟ U+21DF \nHdownarrow*
⇠ U+21E0 \leftdasharrow*
⇡ U+21E1 \updasharrow*
⇢ U+21E2 \rightdasharrow*
⇣ U+21E3 \downdasharrow*
⇦ U+21E6 \leftwhitearrow
⇧ U+21E7 \upwhitearrow
⇨ U+21E8 \rightwhitearrow
⇩ U+21E9 \downwhitearrow
⇪ U+21EA \whitearrowupfrombar
∀ U+2200 \forall
∁ U+2201 \complement
∃ U+2203 \exists
∄ U+2204 \nexists
∅ U+2205 \varnothing
∅ U+2205 \emptyset
∆ U+2206 \increment
∎ U+220E \QED*
∞ U+221E \infty
∟ U+221F \rightangle
∠ U+2220 \angle
∡ U+2221 \measuredangle
∢ U+2222 \sphericalangle
∴ U+2234 \therefore
∵ U+2235 \because
∿ U+223F \sinewave
⊤ U+22A4 \top
⊥ U+22A5 \bot
⊹ U+22B9 \hermitmatrix
⊾ U+22BE \measuredrightangle
◿ U+22BF \varlrtriangle
⋯ U+022EF\cdots
⌀ U+2300 \diameter*
⌂ U+2302 \house
⌐ U+2310 \invnot
⌑ U+2311 \sqlozenge*
⌒ U+2312 \profline*
⌓ U+2313 \profsurf*
⌗ U+2317 \viewdata*
⌙ U+2319 \turnednot
⌬ U+232C \varhexagonlrbonds*
⌲ U+2332 \conictaper*
⌶ U+2336 \topbot
⍀ U+2340 \APLnotbackslash*
⍓ U+2353 \APLboxupcaret*
⍰ U+2370 \APLboxquestion*
⍼ U+237C \rangledownzigzagarrow*
⎔ U+2394 \hexagon*
⎶ U+23B6 \bbrktbrk
⏎ U+23CE \varcarriagereturn*
⏠ U+23E0 \obrbrak
⏡ U+23E1 \ubrbrak
⏢ U+23E2 \trapezium*
⏣ U+23E3 \benzenr*

⏤ U+23E4 \strns*
⏥ U+23E5 \fltns*
⏦ U+23E6 \accurrent*
⏧ U+23E7 \elinters*
␣ U+2423 \mathvisiblespace
Ⓡ U+24C7 \circledR
Ⓢ U+24C8 \circledS
■ U+25A0 \mdlgblksquare*, \blacksquare
□ U+25A1 \mdlgwhtsquare*, \square, \Box
▢ U+25A2 \squoval*
▣ U+25A3 \blackinwhitesquare*
▤ U+25A4 \squarehfill*
▥ U+25A5 \squarevfill*
▦ U+25A6 \squarehvfill*
▧ U+25A7 \squarenwsefill*
▨ U+25A8 \squareneswfill*
▩ U+25A9 \squarecrossfill*
▪ U+25AA \smblksquare*
▫ U+25AB \smwhtsquare*
▬ U+25AC \hrectangleblack*
▭ U+25AD \hrectangle*
▮ U+25AE \vrectangleblack*
▯ U+25AF \vrectangle*
▰ U+25B0 \parallelogramblack*
▱ U+25B1 \parallelogram*
▲ U+25B2 \bigblacktriangleup*
▴ U+25B4 \blacktriangle*
▶ U+25B6 \blacktriangleright*
▸ U+25B8 \smallblacktriangleright*
▷ U+25B9 \smalltriangleright*
► U+25BA \blackpointerright*
▻ U+25BB \whitepointerright*
▼ U+25BC \bigblacktriangledown*
▽ U+25BD \bigtriangledown
▾ U+25BE \blacktriangledown*
▿ U+25BF \triangledown*
◀ U+25C0 \blacktriangleleft*
◂ U+25C2 \smallblacktriangleleft*
◁ U+25C3 \smalltriangleleft*
◄ U+25C4 \blackpointerleft*
◅ U+25C5 \whitepointerleft*
◆ U+25C6 \mdlgblkdiamond*
◇ U+25C7 \mdlgwhtdiamond*
◈ U+25C8 \blackinwhitediamond*
◉ U+25C9 \fisheye*
◊ U+25CA \mdlgwhtlozenge, \lozenge, \Diamond
◌ U+25CC \dottedcircle*
◍ U+25CD \circlevertfill*
◎ U+25CE \bullseye*
● U+25CF \mdlgblkcircle*
◐ U+25D0 \circlelefthalfblack*
◑ U+25D1 \circlerighthalfblack*
◒ U+25D2 \circlebottomhalfblack*
◓ U+25D3 \circletophalfblack*
◔ U+25D4 \circleurquadblack*
◕ U+25D5 \blackcircleulquadwhite*
◖ U+25D6 \blacklefthalfcircle*
◗ U+25D7 \blackrighthalfcircle*
◘ U+25D8 \inversebullet*
◙ U+25D9 \inversewhitecircle*
◠ U+25DA \invwhiteupperhalfcircle*
◡ U+25DB \invwhitelowerhalfcircle*
◜ U+25DC \ularc*
◝ U+25DD \urarc*
◞ U+25DE \lrarc*
◟ U+25DF \llarc*
◠ U+25E0 \topsemicircle*
◡ U+25E1 \botsemicircle*
◢ U+25E2 \lrblacktriangle*
◣ U+25E3 \llblacktriangle*
◤ U+25E4 \ulblacktriangle*
◥ U+25E5 \urblacktriangle*
◦ U+25E6 \circ, \smwhtcircle
◧ U+25E7 \squareleftblack*
◨ U+25E8 \squarerightblack*
◩ U+25E9 \squareulblack*
◪ U+25EA \squarelrblack*
◬ U+25EC \trianglecdot
◭ U+25ED \triangleleftblack*
◮ U+25EE \trianglerightblack*
◯ U+25EF \lgwhtcircle*
◰ U+25F0 \squareulquad*
◱ U+25F1 \squarellquad*
◲ U+25F2 \squarelrquad*
◳ U+25F3 \squareurquad*
◴ U+25F4 \circleulquad*
◵ U+25F5 \circlellquad*
◶ U+25F6 \circlelrquad*
◷ U+25F7 \circleurquad*
◸ U+25F8 \ultriangle*

◹ U+25F9 \urtriangle*
◺ U+25FA \lltriangle*
□ U+25FB \mdwhtsquare*
■ U+25FC \mdblksquare*
▫ U+25FD \mdsmwhtsquare*
▪ U+25FE \mdsmblksquare*
◿ U+25FF \lrtriangle*
★ U+2605 \bigstar*
☆ U+2606 \bigwhitestar*
⊙ U+2609 \astrosun
☡ U+2621 \danger
☻ U+263B \blacksmiley
☼ U+263C \sun
☽ U+263D \rightmoon
☾ U+263E \leftmoon
♀ U+2640 \female
♂ U+2642 \male
♠ U+2660 \spadesuit*
♡ U+2661 \heartsuit*
♢ U+2662 \diamondsuit*
♣ U+2663 \clubsuit*
♤ U+2664 \varspadesuit
♥ U+2665 \varheartsuit
♦ U+2666 \vardiamondsuit
♧ U+2667 \varclubsuit
♩ U+2669 \quarternote
♪ U+266A \eighthnote
♫ U+266B \twonotes
♭ U+266D \flat
♮ U+266E \natural
♯ U+266F \sharp
⊚ U+267E \acidfree*
⚀ U+2680 \dicei
⚁ U+2681 \diceii
⚂ U+2682 \diceiii
⚃ U+2683 \diceiv
⚄ U+2684 \dicev
⚅ U+2685 \dicevi
⚆ U+2686 \circledrightdot
⚇ U+2687 \circledtwodots
⚈ U+2688 \blackcircledrightdot
⚉ U+2689 \blackcircledtwodots
⚥ U+26A5 \Hermaphrodite
○ U+26AA \mdwhtcircle
● U+26AB \mdblkcircle
⚬ U+26AC \mdsmwhtcircle
⚲ U+26B2 \neuter
✓ U+2713 \checkmark
✠ U+2720 \maltese
✪ U+272A \circledstar
✶ U+2736 \varstar
✽ U+273D \dingasterisk
➛ U+279B \draftingarrow*
⟀ U+27C0 \threedangle*
⟁ U+27C1 \whiteinwhitetriangle*
⟃ U+27C3 \subsetcirc*
⟄ U+27C4 \supsetcirc*
⟋ U+27CB \diagup*
⟍ U+27CD \diagdown*
⟐ U+27D0 \diamondcdot*
⤫ U+292B \rdiagovfdiag*
⤬ U+292C \fdiagovrdiag*
⤭ U+292D \seovnearrow*
⤮ U+292E \neovsearrow*
⤯ U+292F \fdiagovnearrow*
⤰ U+2930 \rdiagovsearrow*
⤱ U+2931 \neovnwarrow*
⤲ U+2932 \nwovnearrow*
⤴ U+2934 \uprightcurvearrow*
⤵ U+2935 \downrightcurvedarrow*
● U+2981 \mdsmblkcircle*
⋮ U+2999 \fourvdots*
⦚ U+299A \vzigzag*
⦛ U+299B \measuredangleleft*
⦜ U+299C \rightanglesqr*
⦝ U+299D \rightanglemdot*
⦞ U+299E \angles*
⦟ U+299F \angdnr*
⦠ U+29A0 \gtlpar*
⦡ U+29A1 \sphericalangleup*
⦢ U+29A2 \turnangle*
⦣ U+29A3 \revangle*
⦤ U+29A4 \angleubar*
⦥ U+29A5 \revangleubar*
⦦ U+29A6 \wideangledown*
⦧ U+29A7 \wideangleup*
⦨ U+29A8 \measanglerutone*
⦩ U+29A9 \measanglelutonw*
⦪ U+29AA \measanglerdtose*
⦫ U+29AB \measangleldtosw*
⦬ U+29AC \measangleurtone*
⦭ U+29AD \measangleultonw*

⦪ U+29AE \measangledrtose*
⦫ U+29AF \measangledltosw*
⦰ U+29B0 \revemptyset*
⦱ U+29B1 \emptysetobar*
⦲ U+29B2 \emptysetocirc*
⦳ U+29B3 \emptysetoarr*
⦴ U+29B4 \emptysetoarrl*
⦶ U+29BA \obot*
⦻ U+29BB \olcross*
⦼ U+29BC \odotslashdot*
⦽ U+29BD \uparrowoncircle*
⦾ U+29BE \circledwhitebullet*
⦿ U+29BF \circledbullet*
⧂ U+29C2 \cirscir*
⧃ U+29C3 \cirE*
⧉ U+29C9 \boxonbox*
⧊ U+29CA \triangleodot*
⧋ U+29CB \triangleubar*
⧌ U+29CC \triangles*
⧜ U+29DC \iinfin*
⧝ U+29DD \tieinfty*
⧞ U+29DE \nvinfty*
⧠ U+29E0 \laplac*
⧧ U+29E7 \thermod*
⧨ U+29E8 \downtriangleleftblack*
⧩ U+29E9 \downtrianglerightblack*
⧪ U+29EA \blackdiamonddownarrow*
⧫ U+29EB \blacklozenge
⧬ U+29EC \circledownarrow*
⧭ U+29ED \blackcircledownarrow*
⧮ U+29EE \errbarsquare*
⧯ U+29EF \errbarblacksquare*
⧰ U+29F0 \errbardiamond*
⧱ U+29F1 \errbarblackdiamond*
⧲ U+29F2 \errbarcircle*
⧳ U+29F3 \errbarblackcircle*
⫡ U+2AE1 \perps
⫱ U+2AF1 \topcir

⬒ U+2B12 \squaretopblack
⬓ U+2B13 \squarebotblack
⬔ U+2B14 \squareurblack
⬕ U+2B15 \squarellblack
⬖ U+2B16 \diamondleftblack
⬗ U+2B17 \diamondrightblack
⬘ U+2B18 \diamondtopblack
⬙ U+2B19 \diamondbotblack
⬚ U+2B1A \dottedsquare
⬛ U+2B1B \lgblksquare
⬜ U+2B1C \lgwhtsquare
▪ U+2B1D \vysmblksquare
▫ U+2B1E \vysmwhtsquare
⬟ U+2B1F \pentagonblack
⬠ U+2B20 \pentagon
⬡ U+2B21 \varhexagon
⬢ U+2B22 \varhexagonblack
⬣ U+2B23 \hexagonblack
⬤ U+2B24 \lgblkcircle
◆ U+2B25 \mdblkdiamond
◇ U+2B26 \mdwhtdiamond
⧫ U+2B27 \mdblklozenge
◊ U+2B28 \mdwhtlozenge
⬥ U+2B29 \smblkdiamond
⧫ U+2B2A \smblklozenge
⬨ U+2B2B \smwhtlozenge
⬬ U+2B2C \blkhorzoval
⬭ U+2B2D \whthorzoval
⬮ U+2B2E \blkvertoval
⬯ U+2B2F \whtvertoval
☆ U+2B50 \medwhitestar
★ U+2B51 \medblackstar
⭑ U+2B52 \smwhitestar
⭓ U+2B53 \rightpentagonblack
⭔ U+2B54 \rightpentagon
〒 U+3012 \postalmark
〰 U+3030 \hzigzag
𝕜 U+1D55C\Bbbk
❘ U+XXXX \bracevert*

4.3 Binary operators

\+ U+000B +
± U+00B1 \pm
· U+00B7 \cdotp, \centerdot
× U+00D7 \times
÷ U+00F7 \div
† U+2020 \dagger
‡ U+2021 \ddagger
• U+2022 \smblkcircle

⁄	U+2044	\fracslash
⅋	U+214B	\upand
−	U+000D	-
∓	U+2213	\mp
∔	U+2214	\dotplus
∖	U+2216	\smallsetminus
∗	U+2217	\ast
∘	U+2218	\vysmwhtcircle
•	U+2219	\vysmblkcircle, \bullet
∧	U+2227	\wedge, \land
∨	U+2228	\vee, \lor
∩	U+2229	\cap
∪	U+222A	\cup
∸	U+2238	\dotminus
∾	U+223E	\invlazys
≀	U+2240	\wr
⊌	U+228C	\cupleftarrow
⊍	U+228D	\cupdot
⊎	U+228E	\uplus
⊓	U+2293	\sqcap
⊔	U+2294	\sqcup
⊕	U+2295	\oplus
⊖	U+2296	\ominus
⊗	U+2297	\otimes
⊘	U+2298	\oslash
⊙	U+2299	\odot
⊚	U+229A	\circledcirc
⊛	U+229B	\circledast
⊜	U+229C	\circledequal
⊝	U+229D	\circleddash
⊞	U+229E	\boxplus
⊟	U+229F	\boxminus
⊠	U+22A0	\boxtimes
⊡	U+22A1	\boxdot
⊺	U+22BA	\intercal
⊻	U+22BB	\veebar
⊼	U+22BC	\barwedge
⊽	U+22BD	\barvee
⋄	U+22C4	\diamond, \smwhtdiamond
⋅	U+22C5	\cdot*
⋆	U+22C6	\star
⋇	U+22C7	\divideontimes
⋉	U+22C9	\ltimes
⋊	U+22CA	\rtimes
⋋	U+22CB	\leftthreetimes
⋌	U+22CC	\rightthreetimes
⋎	U+22CE	\curlyvee
⋏	U+22CF	\curlywedge
⋒	U+22D2	\Cap, \doublecap
⋓	U+22D3	\Cup, \doublecup
⌅	U+2305	\varbarwedge*
⍒	U+2306	\vardoublebarwedge*
⌀	U+233D	\obar
△	U+25B3	\triangle, \bigtriangleup
◁	U+22B2	\lhd
▷	U+22B3	\rhd
◁	U+22B4	\unlhd
▷	U+22B5	\unrhd
○	U+25CB	\mdlgwhtcircle*
◫	U+25EB	\boxbar*
⟡	U+27C7	\veedot*
⟑	U+27D1	\wedgedot*
⧫	U+27E0	\lozengeminus*
⟡	U+27E1	\concavediamond*
⟡	U+27E2	\concavediamondtickleft*
⟡	U+27E3	\concavediamondtickright*
⊣□	U+27E4	\whitesquaretickleft*
□⊢	U+27E5	\whitesquaretickright*
⦂	U+2982	\typecolon*
⊖	U+29B5	\circlehbar*
⦶	U+29B6	\circledvert
⦷	U+29B7	\circledparallel
⦸	U+29B8	\obslash
⦹	U+29B9	\operp*
⦺	U+29C0	\olessthan
⦻	U+29C1	\ogreaterthan
⧄	U+29C4	\boxdiag
⧅	U+29C5	\boxbslash
⧆	U+29C6	\boxast
⧇	U+29C7	\boxcircle
⧈	U+29C8	\boxbox*
△	U+29CD	\triangleserifs*
⧖	U+29D6	\hourglass*
⧗	U+29D7	\blackhourglass*
⧢	U+29E2	\shuffle*
⧫	U+29EB	\mdlgblklozenge*
\	U+29F5	\setminus*
⧶	U+29F6	\dsol*
⧹	U+29F7	\rsolbar*
⧺	U+29FA	\doubleplus*
⧻	U+29FB	\tripleplus*
+	U+29FE	\tplus*

⧿ U+29FF \tminus*
⨢ U+2A22 \ringplus
⨣ U+2A23 \plushat
⨤ U+2A24 \simplus
⨥ U+2A25 \plusdot
⨦ U+2A26 \plussim
⨧ U+2A27 \plussubtwo
⨨ U+2A28 \plustrif*
⨩ U+2A29 \commaminus*
⨪ U+2A2A \minusdot
⨫ U+2A2B \minusfdots
⨬ U+2A2C \minusrdots*
⨭ U+2A2D \opluslhrim*
⨮ U+2A2E \oplusrhrim*
⨯ U+2A2F \vectimes*
⨰ U+2A30 \dottimes
⨱ U+2A31 \timesbar
⨲ U+2A32 \btimes
⨳ U+2A33 \smashtimes*
⨴ U+2A34 \otimeslhrim*
⨵ U+2A35 \otimesrhrim*
⨶ U+2A36 \otimeshat*
⨷ U+2A37 \Otimes*
⨸ U+2A38 \odiv*
⨹ U+2A39 \triangleplus*
⨺ U+2A3A \triangleminus*
⨻ U+2A3B \triangletimes*
⨼ U+2A3C \intprod*
⨽ U+2A3D \intprodr*
⨾ U+2A3E \fcmp*
⨿ U+2A3F \amalg
⩀ U+2A40 \capdot*
⩁ U+2A41 \uminus*
⩂ U+2A42 \barcup*
⩃ U+2A43 \barcap*
⩄ U+2A44 \capwedge*
⩅ U+2A45 \cupvee*
⩆ U+2A46 \cupovercap*
⩇ U+2A47 \capovercup*
⩈ U+2A48 \cupbarcap*
⩉ U+2A49 \capbarcap*
⩊ U+2A4A \twocups*
⩋ U+2A4B \twocaps*
⩌ U+2A4C \closedvarcup*
⩍ U+2A4D \closedvarcap*
⩎ U+2A4E \Sqcap*
⩏ U+2A4F \Sqcup*
⩐ U+2A50 \closedvarcupsmashprod*
⩑ U+2A51 \wedgeodot*
⩒ U+2A52 \veeodot*
⩓ U+2A53 \Wedge*
⩔ U+2A54 \Vee*
⩕ U+2A55 \wedgeonwedge*
⩖ U+2A56 \veeonvee*
⩗ U+2A57 \bigslopedvee*
⩘ U+2A58 \bigslopedwedge*
⩚ U+2A5A \wedgemidvert*
⩛ U+2A5B \veemidvert*
⩜ U+2A5C \midbarwedge*
⩝ U+2A5D \midbarvee*
⩞ U+2A5E \doublebarwedge
⩟ U+2A5F \wedgebar*
⩠ U+2A60 \wedgedoublebar*
⩡ U+2A61 \varveebar*
⩢ U+2A62 \doublebarvee*
⩣ U+2A63 \veedoublebar
⩤ U+2A64 \dsub*
⩥ U+2A65 \rsub*
⩱ U+2A71 \eqqplus
⩲ U+2A72 \pluseqq
⫴ U+2AF4 \interleave
⫵ U+2AF5 \nhVvert
⫶ U+2AF6 \threedotcolon
⫻ U+2AFB \trslash
⫽ U+2AFD \sslash
⫿ U+2AFE \talloblong

4.4 Relations

* U+002A *, \ast
: U+003A :
< U+003C <, \less
= U+003D =, \equal
> U+003E >, \greater
⁐ U+2050 \closure*
⟊ U+20D2 \vertoverlay
← U+2190 \leftarrow, \gets

↑	U+2191	\uparrow
→	U+2192	\rightarrow, \to
↓	U+2193	\downarrow
↔	U+2194	\leftrightarrow
↕	U+2195	\updownarrow
↖	U+2196	\nwarrow
↗	U+2197	\nearrow
↘	U+2198	\searrow
↙	U+2199	\swarrow
↚	U+219A	\nleftarrow
↛	U+219B	\nrightarrow
↜	U+219C	\leftwavearrow
↝	U+219D	\rightwavearrow
↞	U+219E	\twoheadleftarrow
↟	U+219F	\twoheaduparrow
↠	U+21A0	\twoheadrightarrow
↡	U+21A1	\twoheaddownarrow
↢	U+21A2	\leftarrowtail
↣	U+21A3	\rightarrowtail
↤	U+21A4	\mapsfrom
↥	U+21A5	\mapsup
↦	U+21A6	\mapsto
↧	U+21A7	\mapsdown
↩	U+21A9	\hookleftarrow
↪	U+21AA	\hookrightarrow
↫	U+21AB	\looparrowleft
↬	U+21AC	\looparrowright
↭	U+21AD	\leftrightsquigarrow
↮	U+21AE	\nleftrightarrow
↯	U+21AF	\downzigzagarrow
↰	U+21B0	\Lsh
↱	U+21B1	\Rsh
↲	U+21B2	\Ldsh
↳	U+21B3	\Rdsh
↶	U+21B6	\curvearrowleft
↷	U+21B7	\curvearrowright
↺	U+21BA	\circlearrowleft
↻	U+21BB	\circlearrowright
↼	U+21BC	\leftharpoonup
↽	U+21BD	\leftharpoondown
↾	U+21BE	\upharpoonright, \restriction
↿	U+21BF	\upharpoonleft
⇀	U+21C0	\rightharpoonup
⇁	U+21C1	\rightharpoondown
⇂	U+21C2	\downharpoonright
⇃	U+21C3	\downharpoonleft
⇄	U+21C4	\rightleftarrows
⇅	U+21C5	\updownarrows
⇆	U+21C6	\leftrightarrows
⇇	U+21C7	\leftleftarrows
⇈	U+21C8	\upuparrows
⇉	U+21C9	\rightrightarrows
⇊	U+21CA	\downdownarrows
⇋	U+21CB	\leftrightharpoons
⇌	U+21CC	\rightleftharpoons
⇍	U+21CD	\nLeftarrow
⇎	U+21CE	\nLeftrightarrow
⇏	U+21CF	\nRightarrow
⇐	U+21D0	\Leftarrow
⇑	U+21D1	\Uparrow
⇒	U+21D2	\Rightarrow
⇓	U+21D3	\Downarrow
⇔	U+21D4	\Leftrightarrow
⇕	U+21D5	\Updownarrow
⇖	U+21D6	\Nwarrow
⇗	U+21D7	\Nearrow
⇘	U+21D8	\Searrow
⇙	U+21D9	\Swarrow
⇚	U+21DA	\Lleftarrow*
⇛	U+21DB	\Rrightarrow*
⇜	U+21DC	\leftsquigarrow
⇝	U+21DD	\rightsquigarrow, \leadsto
⇤	U+21E4	\barleftarrow*
⇥	U+21E5	\rightarrowbar*
⇴	U+21F4	\circleonrightarrow*
⇵	U+21F5	\downuparrows
⇶	U+21F6	\rightthreearrows*
⇷	U+21F7	\nvleftarrow*
⇸	U+21F8	\nvrightarrow*
⇹	U+21F9	\nvleftrightarrow*
⇺	U+21FA	\nVleftarrow*
⇻	U+21FB	\nVrightarrow*
⇼	U+21FC	\nVleftrightarrow*
⇽	U+21FD	\leftarrowtriangle*
⇾	U+21FE	\rightarrowtriangle*
⇿	U+21FF	\leftrightarrowtriangle*
∈	U+2208	\in
∉	U+2209	\notin
∊	U+220A	\smallin
∋	U+220B	\ni, \owns
∌	U+220C	\nni
∍	U+220D	\smallni

$\propto$	U+221D	\propto
$\propto$	U+221D	\varpropto
$\mid$	U+2223	\mid
$\shortmid$	U+2223	\shortmid
$\nmid$	U+2224	\nmid
$\nshortmid$	U+2224	\nshortmid*
$\parallel$	U+2225	\parallel
$\shortparallel$	U+2225	\shortparallel*
$\nparallel$	U+2226	\nparallel
$\nshortparallel$	U+2226	\nshortparallel*
$::$	U+2237	\Colon
$\dashcolon$	U+2239	\dashcolon
$\dotsminusdots$	U+223A	\dotsminusdots
$\kernelcontraction$	U+223B	\kernelcontraction
$\sim$	U+223C	\sim
$\thicksim$	U+223C	\thicksim
$\backsim$	U+223D	\backsim
$\nsim$	U+2241	\nsim
$\eqsim$	U+2242	\eqsim
$\simeq$	U+2243	\simeq
$\nsime$	U+2244	\nsime
$\cong$	U+2245	\cong
$\simneqq$	U+2246	\simneqq
$\ncong$	U+2247	\ncong
$\approx$	U+2248	\approx
$\thickapprox$	U+2248	\thickapprox
$\napprox$	U+2249	\napprox
$\approxeq$	U+224A	\approxeq
$\approxident$	U+224B	\approxident
$\backcong$	U+224C	\backcong
$\asymp$	U+224D	\asymp
$\Bumpeq$	U+224E	\Bumpeq
$\bumpeq$	U+224F	\bumpeq
$\doteq$	U+2250	\doteq
$\Doteq$, $\doteqdot$	U+2251	\Doteq, \doteqdot
$\fallingdotseq$	U+2252	\fallingdotseq
$\risingdotseq$	U+2253	\risingdotseq
$\coloneq$	U+2254	\coloneq
$\eqcolon$	U+2255	\eqcolon
$\eqcirc$	U+2256	\eqcirc
$\circeq$	U+2257	\circeq
$\arceq$	U+2258	\arceq
$\wedgeq$	U+2259	\wedgeq
$\veeeq$	U+225A	\veeeq
$\stareq$	U+225B	\stareq
$\triangleq$	U+225C	\triangleq
$\eqdef$	U+225D	\eqdef
$\measeq$	U+225E	\measeq
$\questeq$	U+225F	\questeq
$\neq$	U+2260	\ne, \neq
$\equiv$	U+2261	\equiv
$\nequiv$	U+2262	\nequiv
$\Equiv$	U+2263	\Equiv
$\leq$	U+2264	\leq, \le
$\geq$	U+2265	\geq, \ge
$\leqq$	U+2266	\leqq
$\geqq$	U+2267	\geqq
$\lneqq$	U+2268	\lneqq
$\lvertneqq$	U+2268	\lvertneqq
$\gneqq$	U+2269	\gneqq
$\gvertneqq$	U+2269	\gvertneqq
$\ll$	U+226A	\ll
$\gg$	U+226B	\gg
$\between$	U+226C	\between
$\nasymp$	U+226D	\nasymp
$\nless$	U+226E	\nless
$\ngtr$	U+226F	\ngtr
$\nleq$	U+2270	\nleq
$\ngeq$	U+2271	\ngeq
$\lesssim$	U+2272	\lesssim
$\gtrsim$	U+2273	\gtrsim
$\nlesssim$	U+2274	\nlesssim
$\ngtrsim$	U+2275	\ngtrsim
$\lessgtr$	U+2276	\lessgtr
$\gtrless$	U+2277	\gtrless
$\nlessgtr$	U+2278	\nlessgtr
$\ngtrless$	U+2279	\ngtrless
$\prec$	U+227A	\prec
$\succ$	U+227B	\succ
$\preccurlyeq$	U+227C	\preccurlyeq
$\succcurlyeq$	U+227D	\succcurlyeq
$\precsim$	U+227E	\precsim
$\succsim$	U+227F	\succsim
$\nprec$	U+2280	\nprec
$\nsucc$	U+2281	\nsucc
$\subset$	U+2282	\subset
$\supset$	U+2283	\supset
$\nsubset$	U+2284	\nsubset
$\nsupset$	U+2285	\nsupset
$\subseteq$	U+2286	\subseteq
$\supseteq$	U+2287	\supseteq
$\nsubseteq$	U+2288	\nsubseteq

⊉ U+2289 \nsupseteq
⫋ U+228A \subsetneq
⫋ U+228A \varsubsetneq*
⫌ U+228B \supsetneq
⫌ U+228B \varsupsetneq*
⊏ U+228F \sqsubset
⊐ U+2290 \sqsupset
⊑ U+2291 \sqsubseteq
⊒ U+2292 \sqsupseteq
⊢ U+22A2 \vdash
⊣ U+22A3 \dashv
⊦ U+22A6 \assert
⊧ U+22A7 \models
⊨ U+22A8 \vDash
⊩ U+22A9 \Vdash
⊪ U+22AA \Vvdash
⊫ U+22AB \VDash
⊬ U+22AC \nvdash
⊭ U+22AD \nvDash
⊮ U+22AE \nVdash
⊯ U+22AF \nVDash
≺ U+22B0 \prurel
≻ U+22B1 \scurel
⊲ U+22B2 \vartriangleleft
⊳ U+22B3 \vartriangleright
⊴ U+22B4 \trianglelefteq
⊵ U+22B5 \trianglerighteq
⊶ U+22B6 \origof
⊷ U+22B7 \imageof
⊸ U+22B8 \multimap
⋈ U+22C8 \bowtie
⋍ U+22CD \backsimeq
⋐ U+22D0 \Subset
⋑ U+22D1 \Supset
⋔ U+22D4 \pitchfork
⋕ U+22D5 \equalparallel
⋖ U+22D6 \lessdot
⋗ U+22D7 \gtrdot
⋘ U+22D8 \lll, \llless
⋙ U+22D9 \ggg, \gggtr
⋚ U+22DA \lesseqgtr
⋛ U+22DB \gtreqless
⋜ U+22DC \eqless
⋝ U+22DD \eqgtr
⋞ U+22DE \curlyeqprec
⋟ U+22DF \curlyeqsucc
⋠ U+22E0 \npreccurlyeq
⋡ U+22E1 \nsucccurlyeq
⋢ U+22E2 \nsqsubseteq
⋣ U+22E3 \nsqsupseteq
⋤ U+22E4 \sqsubsetneq*
⋥ U+22E5 \sqsupsetneq*
⋦ U+22E6 \lnsim
⋧ U+22E7 \gnsim
⋨ U+22E8 \precnsim
⋩ U+22E9 \succnsim
⋪ U+22EA \nvartriangleleft
⋫ U+22EB \nvartriangleright
⋬ U+22EC \ntrianglelefteq
⋭ U+22ED \ntrianglerighteq
⋮ U+22EE \vdots
⋰ U+22F0 \adots
⋱ U+22F1 \ddots
⋲ U+22F2 \disin*
⋳ U+22F3 \varisins*
⋴ U+22F4 \isins*
⋵ U+22F5 \isindot*
⋶ U+22F6 \varisinobar
⋷ U+22F7 \isinobar*
⋸ U+22F8 \isinvb*
⋹ U+22F9 \isinE*
⋺ U+22FA \nisd*
⋻ U+22FB \varnis*
⋼ U+22FC \nis*
⋽ U+22FD \varniobar
⋾ U+22FE \niobar*
⋿ U+22FF \bagmember*
⌒ U+2322 \frown
⌢ U+2322 \smallfrown*
⌣ U+2323 \smile
⌣ U+2323 \smallsmile*
⌿ U+233F \APLnotslash
△ U+25B5 \vartriangle*
⊥ U+27C2 \perp*
⟈ U+27C8 \bsolhsub
⟉ U+27C9 \suphsol
⟒ U+27D2 \upin*
⟓ U+27D3 \pullback*
⟔ U+27D4 \pushout*
⫤ U+27DA \DashVDash*
⫣ U+27DB \dashVdash*
⟜ U+27DC \multimapinv*

⟞ U+27DD \vlongdash*
⟝ U+27DE \longdashv*
⟟ U+27DF \cirbot*
⟰ U+27F0 \UUparrow*
⟱ U+27F1 \DDownarrow*
⟲ U+27F2 \acwgapcirclearrow*
⟳ U+27F3 \cwgapcirclearrow*
⟴ U+27F4 \rightarrowonoplus*
⟵ U+27F5 \longleftarrow*
⟶ U+27F6 \longrightarrow*
⟷ U+27F7 \longleftrightarrow*
⟸ U+27F8 \Longleftarrow*
⟹ U+27F9 \Longrightarrow*
⟺ U+27FA \Longleftrightarrow*
⟻ U+27FB \longmapsfrom*
⟼ U+27FC \longmapsto*
⟽ U+27FD \Longmapsfrom*
⟾ U+27FE \Longmapsto*
⟿ U+27FF \longrightsquigarrow*
⤀ U+2900 \nvtwoheadrightarrow*
⤁ U+2901 \nVtwoheadrightarrow*
⤂ U+2902 \nvLeftarrow*
⤃ U+2903 \nvRightarrow*
⤄ U+2904 \nvLeftrightarrow*
⤅ U+2905 \twoheadmapsto*
⤆ U+2906 \Mapsfrom*
⤇ U+2907 \Mapsto*
⤈ U+2908 \downarrowbarred*
⤉ U+2909 \uparrowbarred*
⤊ U+290A \Uuparrow*
⤋ U+290B \Ddownarrow*
⤌ U+290C \leftbkarrow*
⤍ U+290D \rightbkarrow*
⤎ U+290E \leftdbkarrow*, \dashleftarrow
⤏ U+290F \dbkarow*, \dashrightarrow
⤐ U+2910 \drbkarow*
⤑ U+2911 \rightdotarrow*
⤒ U+2912 \baruparrow*
⤓ U+2913 \downarrowbar*
⤔ U+2914 \nvrightarrowtail*
⤕ U+2915 \nVrightarrowtail*
⤖ U+2916 \twoheadrightarrowtail*
⤗ U+2917 \nvtwoheadrightarrowtail*
⤘ U+2918 \nVtwoheadrightarrowtail*
⤙ U+2919 \lefttail*
⤚ U+291A \righttail*
⤛ U+291B \leftdbltail*
⤜ U+291C \rightdbltail*
⤝ U+291D \diamondleftarrow*
⤞ U+291E \rightarrowdiamond*
⤟ U+291F \diamondleftarrowbar*
⤠ U+2920 \barrightarrowdiamond*
⤡ U+2921 \nwsearrow*
⤢ U+2922 \neswarrow*
⤣ U+2923 \hknwarrow*
⤤ U+2924 \hknearrow*
⤥ U+2925 \hksearow*
⤦ U+2926 \hkswarow*
⤧ U+2927 \tona*
⤨ U+2928 \toea*
⤩ U+2929 \tosa*
⤪ U+292A \towa*
⤳ U+2933 \rightcurvedarrow*
⤶ U+2936 \leftdowncurvedarrow*
⤷ U+2937 \rightdowncurvedarrow*
⤸ U+2938 \cwrightarcarrow*
⤹ U+2939 \acwleftarcarrow*
⤺ U+293A \acwoverarcarrow*
⤻ U+293B \acwunderarcarrow*
⤼ U+293C \curvearrowrightminus*
⤽ U+293D \curvearrowleftplus*
⤾ U+293E \cwundercurvearrow*
⤿ U+293F \ccwundercurvearrow*
⥀ U+2940 \acwcirclearrow*
⥁ U+2941 \cwcirclearrow*
⥂ U+2942 \rightarrowshortleftarrow*
⥃ U+2943 \leftarrowshortrightarrow*
⥄ U+2944 \shortrightarrowleftarrow*
⥅ U+2945 \rightarrowplus*
⥆ U+2946 \leftarrowplus*
⥇ U+2947 \rightarrowx*
⥈ U+2948 \leftrightarrowcircle*
⥉ U+2949 \twoheaduparrowcircle*
⥊ U+294A \leftrightharpoonupdown*
⥋ U+294B \leftrightharpoondownup*
⥌ U+294C \updownharpoonrightleft*
⥍ U+294D \updownharpoonleftright*
⥎ U+294E \leftrightharpoonupup*
⥏ U+294F \updownharpoonrightright*
⥐ U+2950 \leftrightharpoondowndown*
⥑ U+2951 \updownharpoonleftleft*
⥒ U+2952 \barleftharpoonup*

⥙ U+2953 \rightharpoonupbar*
⥠ U+2954 \barupharpoonright*
⥡ U+2955 \downharpoonrightbar*
⥢ U+2956 \barleftharpoondown*
⥣ U+2957 \rightharpoondownbar*
⥤ U+2958 \barupharpoonleft*
⥥ U+2959 \downharpoonleftbar*
⥪ U+295A \leftharpoonupbar*
⥫ U+295B \barrightharpoonup*
⥬ U+295C \upharpoonrightbar*
⥭ U+295D \bardownharpoonright*
⥮ U+295E \leftharpoondownbar*
⥯ U+295F \barrightharpoondown*
⥰ U+2960 \upharpoonleftbar*
⥱ U+2961 \bardownharpoonleft*
⥲ U+2962 \leftharpoonsupdown*
⥳ U+2963 \upharpoonsleftright*
⥴ U+2964 \rightharpoonsupdown*
⥵ U+2965 \downharpoonsleftright*
⥶ U+2966 \leftrightharpoonsup*
⥷ U+2967 \leftrightharpoonsdown*
⥸ U+2968 \rightleftharpoonsup*
⥹ U+2969 \rightleftharpoonsdown*
⥺ U+296A \leftharpoonupdash*
⥻ U+296B \dashleftharpoondown*
⥼ U+296C \rightharpoonupdash*
⥽ U+296D \dashrightharpoondown*
⥾ U+296E \updownharpoonsleftright*
⥿ U+296F \downupharpoonsleftright*
⟹ U+2970 \rightimply*
⟾ U+2971 \equalrightarrow*
⟿ U+2972 \similarrightarrow*
⤀ U+2973 \leftarrowsimilar*
⤁ U+2974 \rightarrowsimilar*
⤂ U+2975 \rightarrowapprox*
⤃ U+2976 \ltlarr*
⤄ U+2977 \leftarrowless*
⤅ U+2978 \gtrarr*
⤆ U+2979 \subrarr*
⤇ U+297A \leftarrowsubset*
⤈ U+297B \suplarr*
⤉ U+297C \leftfishtail*
⤊ U+297D \rightfishtail*
⤋ U+297E \upfishtail*
⤌ U+297F \downfishtail*
⧎ U+29CE \rtriltri*
⧏ U+29CF \ltrivb*
⧐ U+29D0 \vbrtri*
⧑ U+29D1 \lfbowtie*
⧒ U+29D2 \rfbowtie*
⧓ U+29D3 \fbowtie*
⧔ U+29D4 \lftimes*
⧕ U+29D5 \rftimes*
⧟ U+29DF \dualmap*
⧥ U+29E1 \lrtriangleeq*
⧣ U+29E3 \eparsl*
⧤ U+29E4 \smeparsl*
⧣ U+29E5 \eqvparsl*
⧦ U+29E6 \gleichstark*
⧴ U+29F4 \ruledelayed*
⩙ U+2A59 \veeonwedge*
⩦ U+2A66 \eqdot
⩧ U+2A67 \dotequiv
⩨ U+2A68 \equivVert*
⩩ U+2A69 \equivVvert*
⩪ U+2A6A \dotsim
⩫ U+2A6B \simrdots*
⩬ U+2A6C \simminussim*
⩭ U+2A6D \congdot
⩮ U+2A6E \asteq
⩯ U+2A6F \hatapprox
⩰ U+2A70 \approxeqq
⩳ U+2A73 \eqqsim
⩴ U+2A74 \Coloneq*
⩵ U+2A75 \eqeq*
⩶ U+2A76 \eqeqeq*
⩷ U+2A77 \ddotseq*
⩸ U+2A78 \equivDD*
⩹ U+2A79 \ltcir*
⩺ U+2A7A \gtcir*
⩻ U+2A7B \ltquest*
⩼ U+2A7C \gtquest*
⩽ U+2A7D \leqslant
⩾ U+2A7E \geqslant
⩿ U+2A7F \lesdot*
⪀ U+2A80 \gesdot*
⪁ U+2A81 \lesdoto*
⪂ U+2A82 \gesdoto*
⪃ U+2A83 \lesdotor*
⪄ U+2A84 \gesdotol*
⪅ U+2A85 \lessapprox*
⪆ U+2A86 \gtrapprox*

⪇	U+2A87	\lneq
⪈	U+2A88	\gneq
⪉	U+2A89	\lnapprox
⪊	U+2A8A	\gnapprox
⪋	U+2A8B	\lesseqqgtr*
⪌	U+2A8C	\gtreqqless*
⪍	U+2A8D	\lsime*
⪎	U+2A8E	\gsime*
⪏	U+2A8F	\lsimg*
⪐	U+2A90	\gsiml*
⪑	U+2A91	\lgE*
⪒	U+2A92	\glE*
⪓	U+2A93	\lesges*
⪔	U+2A94	\gesles*
⪕	U+2A95	\eqslantless
⪖	U+2A96	\eqslantgtr
⪗	U+2A97	\elsdot*
⪘	U+2A98	\egsdot*
⪙	U+2A99	\eqqless*
⪚	U+2A9A	\eqqgtr*
⪛	U+2A9B	\eqqslantless*
⪜	U+2A9C	\eqqslantgtr*
⪝	U+2A9D	\simless
⪞	U+2A9E	\simgtr
⪟	U+2A9F	\simlE*
⪠	U+2AA0	\simgE*
⪡	U+2AA1	\Lt*
⪢	U+2AA2	\Gt*
⪣	U+2AA3	\partialmeetcontraction*
⪤	U+2AA4	\glj*
⪥	U+2AA5	\gla*
⪦	U+2AA6	\ltcc*
⪧	U+2AA7	\gtcc*
⪨	U+2AA8	\lescc*
⪩	U+2AA9	\gescc*
⪪	U+2AAA	\smt*
⪫	U+2AAB	\lat*
⪬	U+2AAC	\smte*
⪭	U+2AAD	\late*
⪮	U+2AAE	\bumpeqq*
⪯	U+2AAF	\preceq
⪰	U+XXXX	\npreceq*
⪱	U+2AB0	\succeq
⪲	U+XXXX	\nsucceq*
⪳	U+2AB1	\precneq*
⪴	U+2AB2	\succneq*
⪵	U+2AB3	\preceqq*
⪶	U+2AB4	\succeqq*
⪷	U+2AB5	\precneqq*
⪸	U+2AB6	\succneqq*
⪹	U+2AB7	\precapprox*
⪺	U+2AB8	\succapprox*
⪻	U+2AB9	\precnapprox*
⪼	U+2ABA	\succnapprox*
⪽	U+2ABB	\Prec*
⪾	U+2ABC	\Succ*
⪿	U+2ABD	\subsetdot
⫀	U+2ABE	\supsetdot
⫁	U+2ABF	\subsetplus*
⫂	U+2AC0	\supsetplus*
⫃	U+2AC1	\submult*
⫄	U+2AC2	\supmult*
⫅	U+2AC3	\subedot*
⫆	U+2AC4	\supedot*
⫇	U+2AC5	\subseteqq
⫈	U+XXXX	\nsubseteqq*
⫉	U+2AC6	\supseteqq
⫊	U+XXXX	\nsupseteqq*
⫋	U+2AC7	\subsim*
⫌	U+2AC8	\supsim*
⫍	U+2AC9	\subsetapprox*
⫎	U+2ACA	\supsetapprox*
⫏	U+2ACB	\subsetneqq
⫐	U+2ACB	\varsubsetneqq*
⫑	U+2ACC	\supsetneqq
⫒	U+2ACC	\varsupsetneqq*
⫓	U+2ACD	\lsqhook
⫔	U+2ACE	\rsqhook
⫕	U+2ACF	\csub
⫖	U+2AD0	\csup
⫗	U+2AD1	\csube
⫘	U+2AD2	\csupe
⫙	U+2AD3	\subsup
⫚	U+2AD4	\supsub
⫛	U+2AD5	\subsub
⫝̸	U+2AD6	\supsup
⫝	U+2AD7	\suphsub
⫞	U+2AD8	\supdsub
⫟	U+2AD9	\forkv
⫠	U+2ADA	\topfork
⫡	U+2ADB	\mlcp

⫝̸ U+2ADC \forks
⫝ U+2ADD \forksnot
⫞ U+2ADE \shortlefttack
⫟ U+2ADF \shortdowntack
⫠ U+2AE0 \shortuptack
⊨ U+2AE2 \vDdash
⫤ U+2AE3 \dashV
⫣ U+2AE4 \Dashv
⫥ U+2AE5 \DashV
⫦ U+2AE6 \varVdash
⫧ U+2AE7 \Barv
⫨ U+2AE8 \vBar
⫩ U+2AE9 \vBarv
⫪ U+2AEA \barV
⫫ U+2AEB \Vbar
⫬ U+2AEC \Not
⫭ U+2AED \bNot
⫮ U+2AEE \revnmid
⫯ U+2AEF \cirmid
⫰ U+2AF0 \midcir
⫱ U+2AF2 \nhpar
⫲ U+2AF3 \parsim
⫷ U+2AF7 \lllnest
⫸ U+2AF8 \gggnest
⫹ U+2AF9 \leqqslant
⫺ U+2AFA \geqqslant
⬰ U+2B30 \circleonleftarrow*
⬱ U+2B31 \leftthreearrows*
⬲ U+2B32 \leftarrowonoplus*
⬳ U+2B33 \longleftsquigarrow*
⬴ U+2B34 \nvtwoheadleftarrow*
⬵ U+2B35 \nVtwoheadleftarrow*
⬶ U+2B36 \twoheadmapsfrom*
⬷ U+2B37 \twoheadleftdbkarrow*
⬸ U+2B38 \leftdotarrow*
⬹ U+2B39 \nvleftarrowtail*
⬺ U+2B3A \nVleftarrowtail*
⬻ U+2B3B \twoheadleftarrowtail*
⬼ U+2B3C \nvtwoheadleftarrowtail*
⬽ U+2B3D \nVtwoheadleftarrowtail*
⬾ U+2B3E \leftarrowx*
⬿ U+2B3F \leftcurvedarrow*
⭀ U+2B40 \equalleftarrow*
⭁ U+2B41 \bsimilarleftarrow*
⭂ U+2B42 \leftarrowbackapprox*
⭃ U+2B43 \rightarrowgtr*
⭄ U+2B44 \rightarrowsupset*
⭅ U+2B45 \LLeftarrow*
⭆ U+2B46 \RRightarrow*
⭇ U+2B47 \bsimilarrightarrow*
⭈ U+2B48 \rightarrowbackapprox*
⭉ U+2B49 \similarleftarrow*
⭊ U+2B4A \leftarrowapprox*
⭋ U+2B4B \leftarrowbsimilar*
⭌ U+2B4C \rightarrowbsimilar*
≱ U+XXXX \ngeqq
≱ U+XXXX \ngeqslant
≰ U+XXXX \nleqslant
≰ U+XXXX \nleqq
≉ U+XXXX \ncongdot
≉ U+XXXX \napproxeqq
≪ U+XXXX \nll
≫ U+XXXX \ngg
⋢ U+XXXX \nsqsubset
⋣ U+XXXX \nsqsupset
≠ U+XXXX \nBumpeq
≠ U+XXXX \nbumpeq
≁ U+XXXX \neqsim
∉ U+XXXX \nvarisinobar
∌ U+XXXX \nvarniobar
≸ U+XXXX \neqslantless
≹ U+XXXX \neqslantgtr
ʿ U+XXXX \lhook
ʾ U+XXXX \rhook
- U+XXXX \relbar
= U+XXXX \Relbar
≡ U+XXXX \Rrelbar*
≡ U+XXXX \RRelbar*
ˌ U+XXXX \mapsfromchar
ˌ U+XXXX \mapstochar

4.5 Punctuation

,	U+002C ,	:	U+003A \colon
.	U+002E \ldotp	;	U+003B ;

4.6 Integrals

Integrals come in two styles, the slanted versions shown below ($\int$, etc.) and upright versions such as $\int$. By default, the symbol names listed below will give you the slanted style, but if you specify the `upint` package option, they will give you the corresponding upright symbols.

It is highly recommended that authors stick to the names below and use the `upint` package option to choose a style globally for their document. However, in recognition of the fact that it might occasionally be necessary to mix the two styles, alternative names have been provided for all integrals. Append `sl` or `up` to the names below to request either the *sl*anted or the *up*right variant. Thus, `$\intsl$` will always yield $\int$ and `$\intup$` will always yield $\int$, and similarly for the other integrals.

$\int$	U+222B	\smallint	$\fint$	U+2A10	\smallcirfnint
$\iint$	U+222C	\smalliint	$\fint$	U+2A11	\smallawint
$\iiint$	U+222D	\smalliiint	$\fint$	U+2A12	\smallrppolint
$\oint$	U+222E	\smalloint	$\fint$	U+2A13	\smallscpolint
$\oint$	U+222F	\smalloiint	$\fint$	U+2A14	\smallnpolint
$\oint$	U+2230	\smalloiiint	$\fint$	U+2A15	\smallpointint
$\fint$	U+2231	\smallintclockwise	$\fint$	U+2A16	\smallsqint
$\oint$	U+2232	\smallvarointclockwise	$\fint$	U+2A17	\smallintlarhk
$\oint$	U+2233	\smallointctrclockwise	$\fint$	U+2A18	\smallintx
$\sum$	U+2A0B	\smallsumint	$\fint$	U+2A19	\smallintcap
$\iiiint$	U+2A0C	\smalliiiint	$\fint$	U+2A1A	\smallintcup
$\fint$	U+2A0D	\smallintbar	$\int$	U+2A1B	\smallupint
$\fint$	U+2A0E	\smallintBar	$\int$	U+2A1C	\smalllowint
$\fint$	U+2A0F	\smallfint			

$\int$	$\int$	U+222B	\int	$\sum$	$\sum$	U+2A0B	\sumint
$\iint$	$\iint$	U+222C	\iint	$\iiiint$	$\iiiint$	U+2A0C	\iiiint
$\iiint$	$\iiint$	U+222D	\iiint	$\fint$	$\fint$	U+2A0D	\intbar
$\oint$	$\oint$	U+222E	\oint	$\fint$	$\fint$	U+2A0E	\intBar
$\oint$	$\oint$	U+222F	\oiint	$\fint$	$\fint$	U+2A0F	\fint
$\oint$	$\oint$	U+2230	\oiiint	$\fint$	$\fint$	U+2A10	\cirfnint
$\fint$	$\fint$	U+2231	\intclockwise	$\fint$	$\fint$	U+2A11	\awint
$\oint$	$\oint$	U+2232	\varointclockwise	$\fint$	$\fint$	U+2A12	\rppolint
$\oint$	$\oint$	U+2233	\ointctrclockwise	$\fint$	$\fint$	U+2A13	\scpolint

$\fint$	U+2A14	\npolint	
$\cirfnint$	U+2A15	\pointint	
$\sqint$	U+2A16	\sqint	
$\fpartint$	U+2A17	\intlarhk	
$\intx$	U+2A18	\intx	
$\intbar$	U+2A19	\intcap	
$\intBar$	U+2A1A	\intcup	
$\overline{\int}$	U+2A1B	\upint	
$\underline{\int}$	U+2A1C	\lowint	

4.7 Big operators

$\Bbbsum$	U+2140	\Bbbsum	
$\prod$	U+220F	\prod	
$\coprod$	U+2210	\coprod	
$\sum$	U+2211	\sum	
$\bigwedge$	U+22C0	\bigwedge	
$\bigvee$	U+22C1	\bigvee	
$\bigcap$	U+22C2	\bigcap	
$\bigcup$	U+22C3	\bigcup	
$\bigtriangleup$	U+27D5	\leftouterjoin*	
$\bigtriangledown$	U+27D6	\rightouterjoin*	
$\bigtriangleup\!\!\bigtriangledown$	U+27D7	\fullouterjoin*	
$\bigbot$	U+27D8	\bigbot*	
$\bigtop$	U+27D9	\bigtop*	
$\bigsol$	U+29F8	\xsol*	
$\bigbsol$	U+29F9	\xbsol*	
$\bigodot$	U+2A00	\bigodot*	
$\bigoplus$	U+2A01	\bigoplus*	
$\bigotimes$	U+2A02	\bigotimes*	
$\bigcupdot$	U+2A03	\bigcupdot*	
$\biguplus$	U+2A04	\biguplus*	
$\bigsqcap$	U+2A05	\bigsqcap*	
$\bigsqcup$	U+2A06	\bigsqcup*	
$\conjquant$	U+2A07	\conjquant*	
$\disjquant$	U+2A08	\disjquant*	
$\bigtimes$	U+2A09	\bigtimes*	
$\modtwosum$	U+2A0A	\modtwosum*	
$\Join$	U+2A1D	\Join*	
$\bigtriangleleft$	U+2A1E	\bigtriangleleft*	
$\zcmp$	U+2A1F	\zcmp*	
$\zpipe$	U+2A20	\zpipe*	
$\zproject$	U+2A21	\zproject*	
$\biginterleave$	U+2AFC	\biginterleave	
$\bigtalloblong$	U+2AFF	\bigtalloblong*	

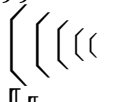
4.8 Delimiters

$/\!/\!/\!\left/\right.$	U+002F	/	
$\backslash\backslash\backslash\left\backslash\right.$	U+005C	\backslash	
$\left(\left(\left(\left(\right.\right.\right.\right.$	U+0028	(	
$\left.\left.\left.\left.\right)\right)\right)\right)$	U+0029	)	
$\left[\left[\left[\left[\right.\right.\right.\right.$	U+005B	[	
$\left.\left.\left.\left.\right]\right]\right]\right]$	U+005D	]	
$\left\{\left\{\left\{\left\{\right.\right.\right.\right.$	U+007B	\lbrace	
$\left.\left.\left.\left.\right\}\right\}\right\}\right\}$	U+007D	\rbrace	


U+2308 \lceil


U+230A \lfloor


U+23B0 \lmoustache*


U+2772 \lbrbrak*

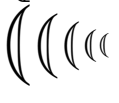

U+27E6 \lBrack*


U+27E8 \langle, <


U+27EA \lAngle*


U+27EE \lgroup*

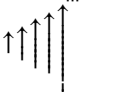

U+2983 \lBrace*


U+2985 \lParen*

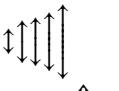

U+007C \vert, |


U+2016 \Vert*, \|

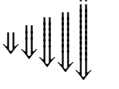

U+2980 \Vvert

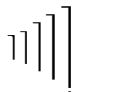

U+2191 \uparrow

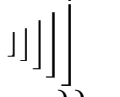

U+2193 \downarrow


U+2195 \updownarrow

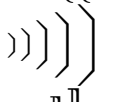

U+21D1 \Uparrow

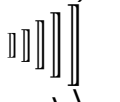

U+21D3 \Downarrow


U+2309 \rceil


U+230B \rfloor

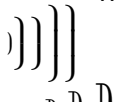

U+23B1 \rmoustache*


U+2773 \rbrbrak*

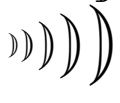

U+27E7 \rBrack*

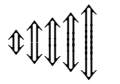

U+27E9 \rangle, >


U+27EB \rAngle*

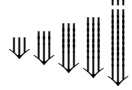

U+27EF \rgroup*


U+2984 \rBrace*

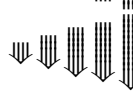

U+2986 \rParen*

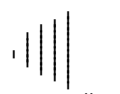

U+21D5 \Updownarrow

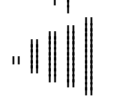

U+290A \Uuparrow*


U+290B \Ddownarrow*


U+27F0 \UUparrow*


U+27F1 \DDownarrow*


U+XXXX \arrowvert


U+XXXX \Arrowvert


U+XXXX \bracevert*

4.9 Other bracess

⌜	U+231C	\ulcorner*
⌝	U+231D	\urcorner*
⌞	U+231E	\llcorner*
⌟	U+231F	\lrcorner*
⟦	U+27EC	\Lbrbrak*
⟧	U+27ED	\Rbrbrak*
⦇	U+2987	\llparenthesis*
⦈	U+2988	\rrparenthesis*
⟨	U+2989	\llangle*
⟩	U+298A	\rrangle*
⦋	U+298B	\lbrackubar*
⦌	U+298C	\rbrackubar*
⦍	U+298D	\lbrackultick*
⦎	U+298E	\rbracklrtick*
⦏	U+298F	\lbracklltick*
⦐	U+2990	\rbrackurtick*
⦑	U+2991	\langledot*
⦒	U+2992	\rangledot*
⦓	U+2993	\lparenless*
⦔	U+2994	\rparengtr*
⦕	U+2995	\Lparengtr*
⦖	U+2996	\Rparenless*
⧘	U+2997	\lblkbrbrak*
⧙	U+2998	\rblkbrbrak*
⧚	U+29D8	\lvzigzag*
⧛	U+29D9	\rvzigzag*
⧜	U+29DA	\Lvzigzag*
⧝	U+29DB	\Rvzigzag*
⧼	U+29FC	\lcurvyangle*
⧽	U+29FD	\rcurvyangle*
⟮	U+2772	\lbrbrak*
⟯	U+2773	\rbrbrak*
⟅	U+27C5	\lbag*
⟆	U+27C6	\rbag*
⟦	U+27EC	\Lbrbrak*
⟧	U+27ED	\Rbrbrak*

4.10 Accents

$\grave{b}$	U+0300	\grave
$\acute{b}$	U+0301	\acute
$\hat{b}$	U+0302	\hat
$\tilde{b}$	U+0303	\tilde
$\bar{b}$	U+0304	\bar
$\breve{b}$	U+0306	\breve
$\dot{b}$	U+0307	\dot
$\ddot{b}$	U+0308	\ddot
$\ovhook{b}$	U+0309	\ovhook
$\mathring{b}$	U+030A	\mathring
$\check{b}$	U+030C	\check
$\candra{b}$	U+0310	\candra
$\oturnedcomma{b}$	U+0312	\oturnedcomma
$\ocommatopright{b}$	U+0315	\ocommatopright
$\droang{b}$	U+031A	\droang
$\leftharpoonaccent{b}$	U+20D0	\leftharpoonaccent
$\rightharpoonaccent{b}$	U+20D1	\rightharpoonaccent
$\leftarrowaccent{b}$	U+20D6	\leftarrowaccent
$\vec{b}$	U+20D7	\vec, \rightarrowaccent
$\leftrightarrowaccent{b}$	U+20E1	\leftrightarrowaccent
$\dddot{b}$	U+20DB	\dddot
$\ddddot{b}$	U+20DC	\ddddot
$\annuity{b}$	U+20E7	\annuity
$\widebridgeabove{b}$	U+20E9	\widebridgeabove
$\asteraccent{b}$	U+20F0	\asteraccent

$\widehat{xxx}$	U+0302	\widehat*
$\widetilde{xxx}$	U+0303	\widetilde*
$\widecheck{xxx}$	U+030C	\widecheck*
$\overleftarrow{xxx}$	U+20D6	\overleftarrow
$\overrightarrow{xxx}$	U+20D7	\overrightarrow
$\underrightarrow{xxx}$	U+20EF	\underrightarrow
$\underleftarrow{xxx}$	U+20EE	\underleftarrow
$\overleftrightarrow{xxx}$	U+20E1	\overleftrightarrow
$\underleftrightarrow{xxx}$	U+034D	\underleftrightarrow
$\overleftharpoon{xxx}$	U+20D0	\overleftharpoon
$\overrightharpoon{xxx}$	U+20D1	\overrightharpoon
$\underleftharpoon{xxx}$	U+20EC	\underleftharpoon
$\underrightharpoon{xxx}$	U+20ED	\underrightharpoon

OpenType STIX fonts include a number of under accents that can be used in math mode, but TeX does not support under accents natively so such glyphs can not be used directly. Under accents can be set using regular

accents and commands like \underaccent from accents package, for example \underaccent{\hat}{X} gives $\underset{\wedge}{X}$. The undertilde package provides \utilde for extensible under tilde accent.

4.11 Over and under brackets

$\overbracket{xxxxxx}$	U+23B4	\overbracket	$\underbracket{xxxxxx}$	U+23B5	\underbracket
$\overparen{xxxxxx}$	U+23DC	\overparen	$\underparen{xxxxxx}$	U+23DD	\underparen
$\overbrace{xxxxxx}$	U+23DE	\overbrace	$\underbrace{xxxxxx}$	U+23DF	\underbrace

4.12 Radicals

$\sqrt{b}$	U+221A	\sqrt	$\overline{)b}$	U+27CC	\longdivision*

5 Font tables

The rest of this document shows fonts table for all STIX fonts. The name before each table is the TEX font name (i.e. TFM file name).

Note that STIX fonts have no real smallcaps, the smallcaps below are synthesized (scaled down upper case letters).

5.1 Text fonts

`ot1-stixgeneral`

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	Γ	Δ	Θ	Λ	Ξ	Π	Σ	Υ	`″0x`
′01x	Φ	Ψ	Ω	ff	fi	fl	ffi	ffl	
′02x	ı	ȷ	`	´	ˇ	˘	¯	°	`″1x`
′03x	¸	ß	æ	œ	ø	Æ	Œ	Ø	
′04x		!	”	#	$	%	&	’	`″2x`
′05x	(	)	*	+	,	-	.	/	
′06x	0	1	2	3	4	5	6	7	`″3x`
′07x	8	9	:	;	¡	=	¿	?	
′10x	@	A	B	C	D	E	F	G	`″4x`
′11x	H	I	J	K	L	M	N	O	
′12x	P	Q	R	S	T	U	V	W	`″5x`
′13x	X	Y	Z	[	“	]	ˆ	˙	
′14x	‘	a	b	c	d	e	f	g	`″6x`
′15x	h	i	j	k	l	m	n	o	
′16x	p	q	r	s	t	u	v	w	`″7x`
′17x	x	y	z	–	—	˝	˜	¨	
	`″8`	`″9`	`″A`	`″B`	`″C`	`″D`	`″E`	`″F`	

ot1-stixgeneralsc

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	Γ	Δ	Θ	Λ	Ξ	Π	Σ	ϒ	″0x
′01x	Φ	Ψ	Ω	ff	fi	fl	ffi	ffl	
′02x	ı	ȷ	`	´	ˇ	˘	¯	°	″1x
′03x	¸	ß	Æ	Œ	ø	Æ	Œ	Ø	
′04x		!	”	#	$	%	&	’	″2x
′05x	(	)	*	+	,	-	.	/	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	:	;	¡	=	¿	?	
′10x	@	A	B	C	D	E	F	G	″4x
′11x	H	I	J	K	L	M	N	O	
′12x	P	Q	R	S	T	U	V	W	″5x
′13x	X	Y	Z	[	“	]	ˆ	˙	
′14x	‘	a	b	c	d	e	f	g	″6x
′15x	h	i	j	k	l	m	n	o	
′16x	p	q	r	s	t	u	v	w	″7x
′17x	x	y	z	–	—	˝	~	¨	
	″8	″9	″A	″B	″C	″D	″E	″F	

t1-stixgeneral

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	`	´	ˆ	˜	¨	˝	°	ˇ	″0x
′01x	˘	¯	˙	¸	˛	,	‹	›	
′02x	“	”	„	«	»	–	—		″1x
′03x	*o*	ı	ȷ	ff	fi	fl	ffi	ffl	
′04x	␣	!	"	#	$	%	&	’	″2x
′05x	(	)	*	+	,	-	.	/	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	:	;	<	=	>	?	
′10x	@	A	B	C	D	E	F	G	″4x
′11x	H	I	J	K	L	M	N	O	
′12x	P	Q	R	S	T	U	V	W	″5x
′13x	X	Y	Z	[	\	]	^	_	
′14x	‘	a	b	c	d	e	f	g	″6x
′15x	h	i	j	k	l	m	n	o	
′16x	p	q	r	s	t	u	v	w	″7x
′17x	x	y	z	{	|	}	~	-	
′20x	Ă	Ą	Ć	Č	Ď	Ě	Ę	Ğ	″8x
′21x	Ĺ	Ľ	Ł	Ń	Ň	Ŋ	Ő	Ŕ	
′22x	Ř	Ś	Š	Ş	Ť	Ţ	Ű	Ů	″9x
′23x	Ÿ	Ź	Ž	Ż	IJ	İ	đ	§	
′24x	ă	ą	ć	č	ď	ě	ę	ğ	″Ax
′25x	Í	ľ	ł	ń	ň	ŋ	ő	ŕ	
′26x	ř	ś	š	ş	ť	ţ	ű	ů	″Bx
′27x	ÿ	ź	ž	ż	ij	¡	¿	£	
′30x	À	Á	Â	Ã	Ä	Å	Æ	Ç	″Cx
′31x	È	É	Ê	Ë	Ì	Í	Î	Ï	
′32x	Đ	Ñ	Ò	Ó	Ô	Õ	Ö	Œ	″Dx
′33x	Ø	Ù	Ú	Û	Ü	Ý	Þ	SS	
′34x	à	á	â	ã	ä	å	æ	ç	″Ex
′35x	è	é	ê	ë	ì	í	î	ï	
′36x	ð	ñ	ò	ó	ô	õ	ö	œ	″Fx
′37x	ø	ù	ú	û	ü	ý	þ	ß	
	″8	″9	″A	″B	″C	″D	″E	″F	

*″18 and ″DF do not exist in STIX OpenType fonts, they were added as part of this package for compatability with T1 encoding.

t1-stixgeneralsc

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	`	´	ˆ	˜	¨	˝	°	ˇ	″0x
′01x	˘	¯	˙	¸	˛	’	‹	›	
′02x	“	”	„	«	»	–	—		″1x
′03x	ı	ȷ	ff	fi	fl	ffi	ffl		
′04x	␣	!	"	#	$	%	&	’	″2x
′05x	(	)	*	+	,	-	.	/	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	:	;	<	=	>	?	
′10x	@	A	B	C	D	E	F	G	″4x
′11x	H	I	J	K	L	M	N	O	
′12x	P	Q	R	S	T	U	V	W	″5x
′13x	X	Y	Z	[	\	]	^	_	
′14x	‘	a	b	c	d	e	f	g	″6x
′15x	h	i	j	k	l	m	n	o	
′16x	p	q	r	s	t	u	v	w	″7x
′17x	x	y	z	{	|	}	~	-	
′20x	Ă	Ą	Ć	Č	Ď	Ě	Ę	Ğ	″8x
′21x	Ĺ	Ľ	Ł	Ń	Ň	Ŋ	Ő	Ŕ	
′22x	Ř	Ś	Š	Ş	Ť	Ţ	Ű	Ů	″9x
′23x	Ÿ	Ź	Ž	Ż	IJ	İ	`	§	
′24x	ă	ą	ć	č	ď	ě	ę	ğ	″Ax
′25x	ĺ	ľ	ł	ń	ň	ŋ	ő	ŕ	
′26x	ř	ś	š	ş	ť	ţ	ű	ů	″Bx
′27x	ÿ	ź	ž	ż	ij	¡	¿	£	
′30x	À	Á	Â	Ã	Ä	Å	Æ	Ç	″Cx
′31x	È	É	Ê	Ë	Ì	Í	Î	Ï	
′32x	Đ	Ñ	Ò	Ó	Ô	Õ	Ö	Œ	″Dx
′33x	Ø	Ù	Ú	Û	Ü	Ý	Þ	SS	
′34x	à	á	â	ã	ä	å	æ	ç	″Ex
′35x	è	é	ê	ë	ì	í	î	ï	
′36x	đ	ñ	ò	ó	ô	õ	ö	œ	″Fx
′37x	ø	ù	ú	û	ü	ý	þ	ss	
	″8	″9	″A	″B	″C	″D	″E	″F	

ot2-stixgeneral

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	Њ	Љ	Ц	Э	І	Є	Ђ	Ћ	″0x
′01x	њ	љ	ц	э	і	є	ђ	ћ	
′02x	Ю	Ж	Й	Ё	Ѵ	Ѳ	S	Я	″1x
′03x	ю	ж	й	ё	ѵ	ѳ	s	я	
′04x	¨	!	”	Ѣ	˚	%	´	’	″2x
′05x	(	)	*	ѣ	,	-	.	/	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	:	;	«	ı	»	?	
′10x	ˇ	А	Б	Ц	Д	Е	Ф	Г	″4x
′11x	Х	И	Ј	К	Л	М	Н	О	
′12x	П	Ч	Р	С	Т	У	В	Щ	″5x
′13x	Ш	Ы	З	[	“	]	Ь	Ъ	
′14x	‘	а	б	ц	д	е	ф	г	″6x
′15x	х	и	ј	к	л	м	н	о	
′16x	п	ч	р	с	т	у	в	щ	″7x
′17x	ш	ы	з	–	—	№	ь	ъ	
′22x			Ў						″9x
′23x									
′26x			ў						″Bx
′27x									
	″8	″9	″A	″B	″C	″D	″E	″F	

*″24 does not exist in STIX OpenType fonts, it was added as part of this package for compatability with OT2 encoding.

ot2-stixgeneralsc

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	Њ	Љ	Џ	Э	І	Є	Ђ	Ћ	″0x
′01x	њ	љ	џ	э	і	є	ђ	ћ	
′02x	Ю	Ж	Й	Ё	Ѵ	Ѳ	S	Я	″1x
′03x	ю	ж	й	ё	ѵ	ѳ	s	я	
′04x	¨	!	”	Ѣ	˚	%	´	’	″2x
′05x	(	)	*	ѣ	,	-	.	/	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	:	;	«	й	»	?	
′10x	ˇ	А	Б	Ц	Д	Е	Ф	Г	″4x
′11x	Х	И	Ј	К	Л	М	Н	О	
′12x	П	Ч	Р	С	Т	У	В	Щ	″5x
′13x	Ш	Ы	З	[	“	]	Ь	Ъ	
′14x	‘	а	б	ц	д	е	ф	г	″6x
′15x	х	и	ј	к	л	м	н	о	
′16x	п	ч	р	с	т	у	в	щ	″7x
′17x	ш	ы	з	–	—	№	ь	ъ	
′22x			Ў						″9x
′23x									
′26x			ў						″Bx
′27x									
	″8	″9	″A	″B	″C	″D	″E	″F	

ts1-stixgeneral

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	`	´	ˆ	˜	¨	˝	°	ˇ	″0x
′01x	˘	¯	˙	¸	˛	‚			
′02x			„						″1x
′03x	←	→							
′04x					$			'	″2x
′05x			*		,		.	/	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9			⟨	−	⟩		
′10x									″4x
′11x						ʊ		○	
′12x								Ω	″5x
′13x				⟦		⟧	↑	↓	
′14x	`								″6x
′15x							♪		
′16x									″7x
′17x							~		
′20x	˘	ˇ	˝	`	†	‡	‖	‰	″8x
′21x	•		$	¢	*f*				
′22x			£	₨				™	″9x
′23x	‰			№	⁒	℮	₀		
′24x			¢	£	¤	¥	¦	§	″Ax
′25x	¨	©	ª		¬	℗	®	¯	
′26x	°	±	²	³	´	µ	¶	·	″Bx
′27x	※	¹	º	√	¼	½	¾	€	
′32x							×		″Dx
′33x									
′36x							÷		″Fx
′37x									
	″8	″9	″A	″B	″C	″D	″E	″F	

5.2 Math fonts

`stix-mathrm`

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x	Γ	Δ	Θ	Λ	Ξ	Π	Σ	ϒ	″0x
′01x	Φ	Ψ	Ω	α	β	γ	δ	ϵ	
′02x	ζ	η	θ	ι	κ	λ	μ	ν	″1x
′03x	ξ	π	ρ	σ	τ	υ	ϕ	χ	
′04x	ψ	ω	ε	ϑ	ϖ	ϱ	ς	φ	″2x
′05x	∇	*∂*	−	+	±	∓	(	)	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	:	;	∗	=	$	?	
′10x	!	A	B	C	D	E	F	G	″4x
′11x	H	I	J	K	L	M	N	O	
′12x	P	Q	R	S	T	U	V	W	″5x
′13x	X	Y	Z	[	\	]	{	/	
′14x	}	a	b	c	d	e	f	g	″6x
′15x	h	i	j	k	l	m	n	o	
′16x	p	q	r	s	t	u	v	w	″7x
′17x	x	y	z	ı	ȷ	#	%	’	
′20x	̀	́	̂	̃	̄	̆	̇	̈	″8x
′21x	̓	̊	̌	̡	̢	̦	̧	̲	
′22x	⃗	⃖	⃗	⃛	⃜	⃡	⃤	⃥	″9x
′23x	*	&	@	¬	·	×	≤	÷	
′24x	Ƶ	/	ə	†	‡	•	..	…	″Ax
′25x	′	″	‴	‵	‶	‷	̂	‼	
′26x	▪	⁄	??	⁀	⁗			□	″Bx
′27x	◇	△	Ɛ	ʊ	ɪ	Å	⊣	Ɔ	
′30x	⅂	⅃	ʎ	ʮ	⅋	∀	℄	∃	″Cx
′31x	∄	∅	∆	∈	∉	ϵ	∋	∌	
′32x	ɘ	∎	∔	≥	⧹	∘	•	∝	″Dx
′33x	∞	∟	∠	∡	∢	∣	∤	∥	
′34x	∦	∧	∨	∩	∪	∴	∵	∅	″Ex
′35x	∷	∸	∹	∺	∻	∼	∽	∾	
′36x	∿	≀	≁	≃	≄	≇	≅	≆	″Fx
′37x	≉	≈	≋	≌	≍	≎	≏	≐	
	″8	″9	″A	″B	″C	″D	″E	″F	

stix-mathit

	′0	′1	′2	′3	′4	′5	′6	′7	
′00x	Γ	Δ	Θ	Λ	Ξ	Π	Σ	Υ	″0x
′01x	Φ	Ψ	Ω	α	β	γ	δ	ϵ	
′02x	ζ	η	θ	ι	κ	λ	μ	ν	″1x
′03x	ξ	π	ρ	σ	τ	υ	ϕ	χ	
′04x	ψ	ω	ε	ϑ	ϖ	ϱ	ς	φ	″2x
′05x	∇	∂	$\aleph$	$\beth$	$\gimel$	$\daleth$	$\rhd$	$\lhd$	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	.	,	<	$\hbar$	>	$\star$	
′10x	$\lneqq$	*A*	*B*	*C*	*D*	*E*	*F*	*G*	″4x
′11x	*H*	*I*	*J*	*K*	*L*	*M*	*N*	*O*	
′12x	*P*	*Q*	*R*	*S*	*T*	*U*	*V*	*W*	″5x
′13x	*X*	*Y*	*Z*	$\flat$	$\natural$	$\sharp$	$\smile$	$\frown$	
′14x	$\hbar$	*a*	*b*	*c*	*d*	*e*	*f*	*g*	″6x
′15x	*h*	*i*	*j*	*k*	*l*	*m*	*n*	*o*	
′16x	*p*	*q*	*r*	*s*	*t*	*u*	*v*	*w*	″7x
′17x	*x*	*y*	*z*	$\imath$	$\jmath$	$\gneqq$	$\ll$	$\frown$	
′20x	`	´	ˆ	~	¯	˘	˙	¨	″8x
′21x	’	°	ˇ	˚	‘	,	¬	±	
′22x	→	←	→	···	....	↔	⌐	¬	″9x
′23x	*	-	^	~	ˇ	^	~	ˇ	
′24x	^	~	ˇ	^	~	ˇ	^	~	″Ax
′25x	ˇ	⌢	⌢	⌣	⌣	-	⌢	⌣	
′26x	⌢	⌢	⌣	⌣	⌐	¬	⌐	¬	″Bx
′27x	$\gg$	≬	$\asymp$	$\nless$	$\ngtr$	$\nleq$	$\ngeq$	$\lesssim$	
′30x	$\gtrsim$	$\nleqslant$	$\ngeqslant$	$\lesssim$	$\gtrsim$	$\nleqslant$	$\ngeqslant$	$\prec$	″Cx
′31x	$\succ$	$\preccurlyeq$	$\succcurlyeq$	$\precsim$	$\succsim$	$\not\prec$	$\not\succ$	$\subset$	
′32x	$\supset$	$\not\subset$	$\not\supset$	$\subseteq$	$\supseteq$	$\not\subseteq$	$\not\supseteq$	$\subsetneq$	″Dx
′33x	$\supsetneq$	⋓	⋓	⋓	$\sqsubset$	$\sqsupset$	$\sqsubseteq$	$\sqsupseteq$	
′34x	$\sqcap$	$\sqcup$	$\oplus$	$\ominus$	$\otimes$	$\oslash$	$\odot$	$\circledcirc$	″Ex
′35x	$\circledast$	$\circleddash$	$\ominus$	$\boxplus$	$\boxminus$	$\boxtimes$	$\boxdot$	$\vdash$	
′36x	$\dashv$	$\top$	$\perp$	$\vdash$	$\models$	$\models$	$\Vdash$	$\Vvdash$	″Fx
′37x	$\Vdash$	$\nvdash$	$\nvDash$	$\nVdash$	$\nVDash$	$\precnsim$	$\succnsim$	$\trianglelefteq$	
	″8	″9	″A	″B	″C	″D	″E	″F	

stix-mathsf

	′0	′1	′2	′3	′4	′5	′6	′7	
′00x	Γ	Δ	Θ	Λ	Ξ	Π	Σ	Υ	″0x
′01x	Φ	Ψ	Ω	α	β	γ	δ	ϵ	
′02x	ζ	η	θ	ι	κ	λ	μ	ν	″1x
′03x	ξ	π	ρ	σ	τ	υ	ϕ	χ	
′04x	ψ	ω	ε	ϑ	ϖ	ϱ	ς	φ	″2x
′05x	∇	∂	‘	’	‐	⁼	⁻	⁽	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	⁺	⁾	₋	₌	₍	₎	
′10x	⇌	A	B	C	D	E	F	G	″4x
′11x	H	I	J	K	L	M	N	O	
′12x	P	Q	R	S	T	U	V	W	″5x
′13x	X	Y	Z	⇍	⇋	⇦	⇏	⟰	
′14x	⟱	a	b	c	d	e	f	g	″6x
′15x	h	i	j	k	l	m	n	o	
′16x	p	q	r	s	t	u	v	w	″7x
′17x	x	y	z	ı	ȷ	←	↑	⁀	
′20x	ˋ	ˊ	ˆ	˜	¯	˘	˙	¨	″8x
′21x	˒	˚	ˇ	˝	˓	˒	˥	˩	
′22x	˥	˩	→	⋯	⋯⋯	↔	⌐	¬	″9x
′23x	*	→	↓	↔	↕	↖	↗	↘	
′24x	↙	↚	↛	↜	↝	↞	↟	↠	″Ax
′25x	↡	↢	↣	↤	↥	↦	↧	↨	
′26x	↩	↪	↫	↬	↭	↮	↯	↰	″Bx
′27x	↱	↲	↳	↴	↵	↶	↷	↸	
′30x	↹	↺	↻	↼	↽	↾	↿	⇀	″Cx
′31x	⇁	⇂	⇃	⇄	⇅	⇆	⇇	⇈	
′32x	⇉	⇊	⇋	⇌	⇍	⇎	⇏	⇐	″Dx
′33x	⇑	⇒	⇓	⇔	⇕	⇖	⇗	⇘	
′34x	⇙	⇚	⇛	⇜	⇝	⇞	⇟	⇠	″Ex
′35x	⇡	⇢	⇣	⇤	⇥	⇦	⇧	⇨	
′36x	⇩	⇪	⇫	⇵	⇶	⇷	⇸	⇹	″Fx
′37x	⇺	⇻	⇼	⇽	⇾	⇿	⟰	⟱	
	″8	″9	″A	″B	″C	″D	″E	″F	

*″28, ″3A, ″7B and ″7C do not exist in STIX OpenType fonts.

	′0	′1	′2	′3	′4	′5	′6	′7	
′00x	Γ	Δ	Θ	Λ	Ξ	Π	Σ	Υ	″0x
′01x	Φ	Ψ	Ω	α	β	γ	δ	ϵ	
′02x	ζ	η	θ	ι	κ	λ	μ	ν	″1x
′03x	ξ	π	ρ	σ	τ	υ	ϕ	χ	
′04x	ψ	ω	ε	ϑ	ϖ	ϱ	ς	φ	″2x
′05x	∇	∂	⟴	⬳	⇜	⇞	⇜	⇠	
′06x	0	1	2	3	4	5	6	7	″3x
′07x	8	9	⇠	⇜	⇞	⇜	⇞	⇞	
′10x	⇷	A	B	C	D	E	F	G	″4x
′11x	H	I	J	K	L	M	N	O	
′12x	P	Q	R	S	T	U	V	W	″5x
′13x	X	Y	Z	↶	⇐	⇜	⇜	⇛	
′14x	∋	a	b	c	d	e	f	g	″6x
′15x	h	i	j	k	l	m	n	o	
′16x	p	q	r	s	t	u	v	w	″7x
′17x	x	y	z	ı	ȷ	⇚	⇛	⏜	
′20x	`	´	^	~	¯	˘	˙	¨	″8x
′21x	˚	˚	ˇ	˚	‘	’	˩	˩	
′22x	¯	←	→	···	····	↔	⌝	⌐	″9x
′23x	*	↠	↠	⇎	⇏	⇎	↦	⇇	
′24x	⇨	↡	↟	⇜	⇇	←-	-→	←-	″Ax
′25x	⇢	›⇢	⇢	↑	↓	↠	↠	↠	
′26x	↠	↠	≺	≻	⋠	⋡	⇤	⇥	″Bx
′27x	⇤	⇥	⤡	⤢	⤡	⤢	⤡	⤢	
′30x	⤫	⤮	⤫	⤫	⤬	⤬	⤮	⤮	″Cx
′31x	⤬	⤭	⤫	⤫	⇝	⇗	⇝	⇗	
′32x	⤿	⤾	⤹	⤺	⤻	⤼	⤺	⤾	″Dx
′33x	⤿	⟳	⟳	⇄	⇆	⇄	⇉	⇆	
′34x	↛	⇹	⇞	⇀	⇁	⇂	⇃	⇀	″Ex
′35x	↾	⇁	⇃	↼	⇀	↾	⇂	↼	
′36x	⇀	↾	⇂	↽	⇀	↿	↾	↽	″Fx
′37x	⇀	⇃	⇂	⇐	⇑	⇒	⇓	⇐	
	″8	″9	″A	″B	″C	″D	″E	″F	

*″28, ″7B and ″7C do not exist in STIX OpenType fonts.

stix-mathtt

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	⟳	⟴	⟵	⟶	⟷	⟸	⟹	⟺	"0x
'01x	⟻	⟼	⟽	⟾	⟿	⟲	⥲	♠	
'02x	♡	♢	♣	¶	§	⥦	⥧	⥨	"1x
'03x	⥪	⥫	⥬	⥭	⥮	⥯	⥰	⥱	
'04x	⥲	⥳	⥴	⥵	⥶	⥷	⥸	⥹	"2x
'05x	⥺	⥻	⥼	⥽	⥾	⥿	♧	♩	
'06x	0	1	2	3	4	5	6	7	"3x
'07x	8	9	♪	♫	⚀	⚁	⚂	⚃	
'10x	⚄	A	B	C	D	E	F	G	"4x
'11x	H	I	J	K	L	M	N	O	
'12x	P	Q	R	S	T	U	V	W	"5x
'13x	X	Y	Z	⚅	⚆	⚇	⚈	⚉	
'14x	⚥	a	b	c	d	e	f	g	"6x
'15x	h	i	j	k	l	m	n	o	
'16x	p	q	r	s	t	u	v	w	"7x
'17x	x	y	z	ı	ȷ	○	●	⁀	
'20x	◦	♀	✓	✠	✪	✶	✽		"8x
'21x	◩	◪	◫	◬	◭	◮	◯	◰	
'22x	◱	◲	◳	◴	◵	◶	◷	◸	"9x
'23x	◹	◺	◻	◼	◽	◾	◿	★	
'24x	☆	⨰	⨱	⨲	⨳	⨴	⨵	⨶	"Ax
'25x	⨷	⨸	⨹	⨺	⨻	⨼	⨽	⨾	
'26x	⨿	⩀	⩁	⩂	⩃	⩄	⩅	⩆	"Bx
'27x	⩇	⩈							
	"8	"9	"A	"B	"C	"D	"E	"F	

*"7B and "7C do not exist in STIX OpenType fonts.

stix-mathbb

	′0	′1	′2	′3	′4	′5	′6	′7	
′00x	𝛤					𝛱			″0x
′01x						𝛶			
′02x									″1x
′03x		𝛑							
′04x							≮	≯	″2x
′05x	≯	≮	≮	≯	≯	≯	≯	≮	
′06x	𝟘	𝟙	𝟚	𝟛	𝟜	𝟝	𝟞	𝟟	″3x
′07x	𝟠	𝟡	≻	⊂	⊃	⊄	⊅	⊄	
′10x	⊅	𝔸	𝔹	ℂ	𝔻	𝔼	𝔽	𝔾	″4x
′11x	ℍ	𝕀	𝕁	𝕂	𝕃	𝕄	ℕ	𝕆	
′12x	ℙ	ℚ	ℝ	𝕊	𝕋	𝕌	𝕍	𝕎	″5x
′13x	𝕏	𝕐	ℤ	⊆	⊇	⊆	⊇	⊆	
′14x	⊇	𝕒	𝕓	𝕔	𝕕	𝕖	𝕗	𝕘	″6x
′15x	𝕙	𝕚	𝕛	𝕜	𝕝	𝕞	𝕟	𝕠	
′16x	𝕡	𝕢	𝕣	𝕤	𝕥	𝕦	𝕧	𝕨	″7x
′17x	𝕩	𝕪	𝕫	⊩	⊫	⊆	⊇	⌢	
′20x	ˋ	ˊ	ˆ	˜	¯	˘	˙	¨	″8x
′21x	’	°	ˇ	˚	‘	¸	˩	ˍ	
′22x	˥	˦	˧	⋯	⋯⋯	↕	⌐	˩	″9x
′23x	*	⊍	⊎	⊃	⊔	⊓	⊞	⊞	
′24x	⊛	∴	∵	⩓	⩔	⩓	⩔	∨	″Ax
′25x	∧	⋇	⩓	⩔	⩓	∀	⩖	△	
′26x	≜	≚	⩖	≚	◁	▷	≒	≔	″Bx
′27x	⋕	⋕	≁	≁	≈	≗	≛	≈	
′30x	≋	≒	≐	≅	⩴	==	===	≒	″Cx
′31x	≣	≪	≫	≮	≯	⩽	⩾	⩽	
′32x	⩾	⩽	⩾	⩽	⩾	≨	≨	≮	″Dx
′33x	≯	≩	≩	⩽	⩾	≀	≀	⩽	
′34x	≩	⩽	⩾	⩾	⩾	⩽	⩾	⩽	″Ex
′35x	⩾	⩽	⩾	⩽	⩾	≁	≁	⩾	
′36x	⩾	⩽	⩾	⩽	⩽	×	◁	▷	″Fx
′37x	◁	▷	⩽	⩾	⩽	⩾	⩾	≮	
	″8	″9	″A	″B	″C	″D	″E	″F	

*″7B and ″7C do not exist in STIX OpenType fonts.

stix-mathbbit

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	𝆑	𝆒	𝆓	𝆔	𝆕	𝆖	𝆗	𝆘	"0x
'01x	𝆙	𝆚	𝆛	𝆜	𝆝	𝆞	𝆟	𝆠	
'02x	𝆡	𝆢	𝆣	𝆤	𝆥	𝆦	𝆧	𝆨	"1x
'03x	𝆩	𝆪	𝆫	𝆬	𝆭	𝆮	𝆯	𝆰	
'04x	𝆱	𝆲	𝆳	𝆴	𝆵	𝆶	𝆷	𝆸	"2x
'05x	𝆹	𝆺	𝆹𝅥	𝆺𝅥	𝆹𝅥𝅮	𝆺𝅥𝅮	𝆹𝅥𝅯	𝆺𝅥𝅯	
'06x	𝟘	𝟙	𝟚	𝟛	𝟜	𝟝	𝟞	𝟟	"3x
'07x	𝟠	𝟡							
'10x		𝔸	𝔹	ℂ	𝔻	𝔼	𝔽	𝔾	"4x
'11x	ℍ	𝕀	𝕁	𝕂	𝕃	𝕄	ℕ	𝕆	
'12x	ℙ	ℚ	ℝ	𝕊	𝕋	𝕌	𝕍	𝕎	"5x
'13x	𝕏	𝕐	ℤ						
'14x		𝕒	𝕓	𝕔	𝕕	𝕖	𝕗	𝕘	"6x
'15x	𝕙	𝕚	𝕛	𝕜	𝕝	𝕞	𝕟	𝕠	
'16x	𝕡	𝕢	𝕣	𝕤	𝕥	𝕦	𝕧	𝕨	"7x
'17x	𝕩	𝕪	𝕫	𝇁	𝇂	£		⁀	
'20x	`	´	^	~	¯	˘	˙	¨	"8x
'21x	˾	˚	ˇ	˝	˛	¸	˩	˨	
'22x	˥	←	→	···	····	↔	⌐	¬	"9x
'23x	*	⫋	⫌	⊏	⊐	⊑	⊒	⊓	
'24x	⊔	⫅	⫆	⫇	⫈	⋝	⋞	⋒	"Ax
'25x	⋓	⋔	⫓	⫔	⊣	⊤	⊥	⫪	
'26x	⊧	⫤	⊣	⫤	⊩	⊤	⫠	⫟	"Bx
'27x	⊤	⫫	⫬	⊨	⫞	⫯	⫰	⫱	
'30x	⫴	⫵	⫶	⫷	⋮	⋘	⋙	⋚	"Cx
'31x	⋛	⫽	⫻	//	‖	⬒	⬓	◹	
'32x	◸	◆	⬖	⬘	⬙	⬚	■	□	"Dx
'33x	▪	▫	⬟	⬠	⬡	⬢	⬣	●	
'34x	◆	◇	♦	◊	⬥	⧫	⋄	⬬	"Ex
'35x	⬭	⬮	⬯	☆	★	☆	⬢	⬠	
'36x	⊼	⁓	⫲	‿	‿	⊙	⫒	☻	"Fx
'37x	☼	☽	☾	♀	♂	♤	♥	♦	
	"8	"9	"A	"B	"C	"D	"E	"F	

*"7B and "7C do not exist in STIX OpenType fonts.

stix-mathscr

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	⪰	⊶	⊷	⊸	⊹	⊺	⊻	⊼	"0x
'01x	⊽	⊾	⊿	⋄	⋅	⋇	⋈	⋉	
'02x	⋊	⋋	⋌	⋍	⋎	⋏	⋐	⋑	"1x
'03x	⋒	⋓	⋔	⋕	⋖	⋗	⋘	⋙	
'04x	⋚	⋛	⋜	⋝	⋞	⋟	⋠	⋡	"2x
'05x	⋢	⋣	⋤	⋥	⋦	⋧	⋨	⋩	
'06x	⋪	⋫	⋬	⋭	⋮	⋯	⋰	⋱	"3x
'07x	⋲	⋳	⋴	⋵	⋶	⋷	⋸	⋹	
'10x	⋺	𝒜	ℬ	𝒞	𝒟	ℰ	ℱ	𝒢	"4x
'11x	ℋ	ℐ	𝒥	𝒦	ℒ	ℳ	𝒩	𝒪	
'12x	𝒫	𝒬	ℛ	𝒮	𝒯	𝒰	𝒱	𝒲	"5x
'13x	𝒳	𝒴	𝒵	⋽	⋾	⋿	⋻	⋼	
'14x	⌀	𝒶	𝒷	𝒸	𝒹	ℯ	𝒻	ℊ	"6x
'15x	ℏ	𝒾	𝒿	𝓀	ℓ	𝓂	𝓃	𝑜	
'16x	𝓅	𝓆	𝓇	𝓈	𝓉	𝓊	𝓋	𝓌	"7x
'17x	𝓍	𝓎	𝓏	𝓲	𝓳	℘	⌂	⌒	
'20x	̀	́	̂	̃	̄	̆	̇	̈	"8x
'21x	̉	̊	̌	̰	̱	̲	̳	̴	
'22x	̵	̶	̷	⋯	⋯⋯	↔	⌐	¬	"9x
'23x	*	⊼	⊽	⌐	⌑	⌒	⌓	⌗	
'24x	⌙	⌜	⌝	⌞	⌟	⌬	⌲	⌶	"Ax
'25x	⌽	⌿	⍀	⍓	⍰	⍼	⎔	⏎	
'26x	⏢	⏣	⏤	⏥	⏦	⏧	␣	■	"Bx
'27x	□	▢	▣	▤	▥	▦	▧	▨	
'30x	▩	▪	▫	▬	▭	▮	▯	▰	"Cx
'31x	▱	▲	△	▴	▵	▶	▷	▸	
'32x	▹	►	▻	▼	▽	▾	▿	◀	"Dx
'33x	◁	◂	◃	◄	◅	◆	◇	◈	
'34x	◉	◊	○	◌	◍	◎	●	◐	"Ex
'35x	◑	◒	◓	◔	◕	◖	◗	◘	
'36x	◙	◚	◛	◜	◝	◞	◟	◠	"Fx
'37x	◡	◢	◣	◤	◥	◦	◧	◨	
	"8	"9	"A	"B	"C	"D	"E	"F	

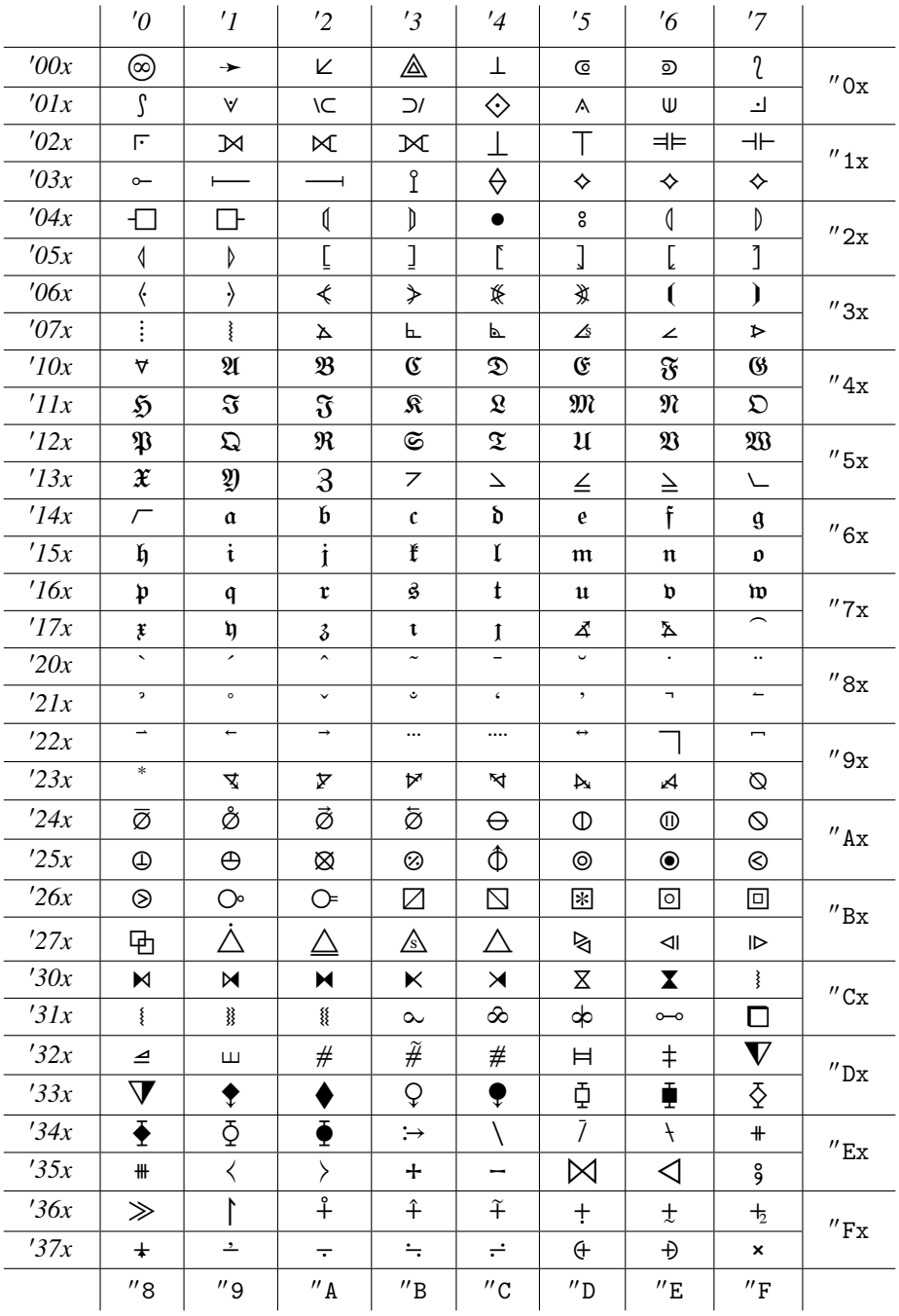
*"7B and "7C do not exist in STIX OpenType fonts.

	′0	′1	′2	′3	′4	′5	′6	′7	
′00x	∫	∬	∭	∮	∯	∰	∱	∲	″0x
′01x	∳	∤	⨌	∱	∤	∱	∱	∱	
′02x	∱	∱	∱	∱	∱	∱	∤	∱	″1x
′03x	∲	⨍	⨍	∫	∬	⨌	∱	∯	
′04x	∰	∱	∱	∱	∤	⨌	∱	∱	″2x
′05x	∱	∱	∱	∱	∱	∱	∱	∱	
′06x	∱	∤	∱	∲	⨍	⨍			″3x
′07x			®	Ⓢ	╲	╱	ð	⌢	
′10x	⌣	𝒜	ℬ	𝒞	𝒟	ℰ	ℱ	𝒢	″4x
′11x	ℋ	ℐ	𝒥	𝒦	ℒ	ℳ	𝒩	𝒪	
′12x	𝒫	𝒬	ℛ	𝒮	𝒯	𝒰	𝒱	𝒲	″5x
′13x	𝒳	𝒴	𝒵	≥	≤	⊀	⊁	ı	
′14x	∥	⊊	⊋	⊊	⊋	≡	≤	≥	″6x
′15x	≦	≧							
′16x									″7x
′17x			⨯	ꟻ	ɜ	¥	∝	⌢	
′20x	≏	≐	÷	≒	≓	≔	≕	≖	″8x
′21x	≗	≙	≙	≚	≛	≙	≝	≞	
′22x	≟	≠	≡	≢	∫	∬	∭	∮	″9x
′23x	∯	∰	∱	∮	∮	∤	⨌	∱	
′24x	∱	∱	∱	∱	∱	∱	∱	∱	″Ax
′25x	∱	∱	∤	∱	∲	⨍	⨍	∫	
′26x	∬	∭	∮	∯	∰	∱	∮	∮	″Bx
′27x	∤	⨌	∱	∱	∱	∱	∱	∱	
′30x	∱	∱	∱	∱	∱	∤	∱	∲	″Cx
′31x	⨍	⨍	∫	∬	⨌	∮	∯	∰	
′32x	∱	∮	∮	∤	⨌	∱	∱	∱	″Dx
′33x	∱	∱	∱	∱	∱	∱	∱	∱	

*″09, ″24, ″9D, ″B8, ″D3 and ″EE do not exist in **bold** STIX OpenType fonts.

'34x									″Ex
'35x									
'36x									″Fx
'37x									
	″8	″9	″A	″B	″C	″D	″E	″F	

stix-mathfrak



*″7B and ″7C do not exist in STIX OpenType fonts.

	'0	*'1*	*'2*	*'3*	*'4*	*'5*	*'6*	*'7*	
'00x	(	)	⦇	⦈	[	]	⟦	⟧	"0x
'01x	⌊	⌋	⌈	⌉	{	}	⦃	⦄	
'02x	⟨	⟩	⟪	⟫	⦗	⦘	/	\	"1x
'03x	(	)	⦇	⦈	[	]	⟦	⟧	
'04x	⌊	⌋	⌈	⌉	{	}	⦃	⦄	"2x
'05x	⟨	⟩	⟪	⟫	⦗	⦘	/	\	
'06x	(	)	⦇	⦈	[	]	⟦	⟧	"3x
'07x	⌊	⌋	⌈	⌉	{	}	⦃	⦄	
'10x	⟨	⟩	⟪	⟫	⦗	⦘	/	\	"4x
'11x	(	)	⦇	⦈	[	]	⟦	⟧	
'12x	⌊	⌋	⌈	⌉	{	}	⦃	⦄	"5x
'13x	⟨	⟩	⟪	⟫	⦗	⦘	/	\	
'14x	⎛	⎞	⎡	⎤	⎣	⎦	⎢	⎥	"6x
'15x	⎛	⎞	⎝	⎠	⎧	⎫	⎪		

′16x	⟍	⟩	⏐	⏐	√	√	√	√	″7x
′17x	⏐	⌐							
′26x	⨋	∏	⨿	∑	⋀	⋁	⋂	⋃	″Bx
′27x	/	\	⊙	⊕	⊗	⊍	⊎	⊓	
′30x	⊔	⩓	⩛	×	⧺	⧻	⨋	∏	″Cx
′31x	⨿	∑	⋀	⋁	⋂	⋃	/	\	
′32x	⊙	⊕	⊗	⊍	⊎	⊓	⊔	⩓	″Dx
′33x	⩛	×	⧺	⧻	(	)	⦅	⦆	
′34x	⟦	⟧	⌊	⌋	⌈	⌉	⟅	⟆	″Ex
′35x	⦃	⦄	⟨	⟩	⟪	⟫	⦇	⦈	
′36x	⏐	‖	⏐⏐⏐	ı	ıı	⏐⏐⏐			″Fx
′37x		√	⌡						
	″8	″9	″A	″B	″C	″D	″E	″F	

stix-extra1

	'0	'1	'2	'3	'4	'5	'6	'7	
'00x	⫼	⫼	⫋	⫌	⫝̸	⫝	⫞	⫟	"0x
'01x	⫻	⫽	⫌	⫋	⫝	⫝̸	⫠	⫡	
'02x	⫢	⫣	⫤	⫥	⫦	⫧	⫨	⫩	"1x
'03x	⫪	⫫	⫬	⫭	⫮	⫯	⫰	⫱	
'04x	⫳	⫴	⫵	⫶	⫷	⫸	⫹	⫺	"2x
'05x	⫷	⫸	⫹	⫺	⫷	⫸	⫻	⫼	
'06x	⫽	( )	(·)				⫽	⫾	"3x
'07x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	
'10x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	"4x
'11x	√2	√3	⫿	⫿	⫿	⫿	⫿	⫿	
'12x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	"5x
'13x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	
'14x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	"6x
'15x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	
'16x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	"7x
'17x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	
'20x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	"8x
'21x	CTRL	RET	ESC	CMD	TAB	SPACE	DEL	ALT	
'22x	OPTION	▪	ENTER	SHIFT	MOD1	MOD2	⫿	⫿	"9x
'23x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	
'24x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	"Ax
'25x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	
'26x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	"Bx
'27x	⫿	⫿	⫿	⫿	⫿	⫿	⫿	⫿	
'30x	√	⫿	⫿	⫿	⫿	⫿	⫿	A	"Cx
'31x	B	E	Z	H	I	K	M	N	
'32x	O	P	⫿	T	X	o			"Dx
'33x									
	"8	"9	"A	"B	"C	"D	"E	"F	

stix-extra2

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′04x									″2x
′05x									
′22x									″9x
′23x									
′24x									″Ax
′25x									
′26x									″Bx
′27x									
′30x									″Cx
′31x									
′36x									″Fx
′37x									
	″8	″9	″A	″B	″C	″D	″E	″F	

stix-extra3

	′0	*′1*	*′2*	*′3*	*′4*	*′5*	*′6*	*′7*	
′00x									″0x
′01x									
′04x									″2x
′05x									
′06x									″3x
′07x									
	″8	″9	″A	″B	″C	″D	″E	″F	