

Changelog

All notable changes to this project will be documented in this file.

6.2

- Fixed monospaced property #1325

6.1

- Fixed hinting settings to match Glyphs export #1315

6.0

Unicode:

- Fixed height of ∑ U+2211 N-ARY SUMMATION #1083
- Added U+2241..U+224B ↯ ≈ ≃ ≠ ≅ ≇ ⋈ / ≐ ≒ #1090
- Added new enclosed characters from Unicode 13 U+0229C ⊖ , U+1F10D , U+1F10E , U+1F10F , U+1F16D , U+1F16E , U+1F16F , U+1F1AD #1070
- Redrew U+27F0..U+27FF Supplemental Arrows-A to be strict monospace
⤵↩⇌⇔⇄⇆⇊⇍⇎⇏➡ #1109 #1123
- Added U+220E End of Proof ■ #1115
- Added U+FFFF Replacement Character ◆ #1137, thanks @gjnq
- Added U+EE00..U+EE0B Progress Bar ▬ #1182
- Added U+2237 Proportion ∴ #1219
- Added U+21AA Rightwards Arrow with Hook ➞ #1307

Changed:

- Fixed weird look of `::<` `::>` `<::` `>::` #1145
- `---` now makes a line #1190

Removed:

- C-style compound assignment `>>=` `<<=` `||=` `|=` are not combined with equal sign by default. Old behavior is moved into `ss09` #974
- Restored short `|` by default, long one moved to `cv30` #843 #1160
- Moved `.-` into `cv25` #670 #860 #1103
- Moved `.=` into `cv32` #670
- Removed named "Retina" instance from FiraCode-VF.ttf (you can still get it by setting `wght=450`) #1318

Added (variants):

- Alternative a cv01 #949
- Alternative g cv02 #886
- Alternative i cv03 - cv06
- Alternative l cv07 - cv10 #899
- Alternative o cv11 - cv13
- Alternative 3 cv14
- Top-aligned * cv15
- Hexagonal * cv16 #708 #1134
- Top-aligned ~ cv17
- Alternative % cv18

- `<=` with a horizontal bar `cv19`
- `<=` as an arrow `cv20` #34 #696 #858
- `=<` as less than or equal `cv21` #34
- `=<` as less than or equal with horizontal bar `cv22` #34
- `>=` with a horizontal bar `cv23`
- `/=` as not equals `cv24` #125
- Added `:-` to `cv26` #790
- Returned `[]` as `cv27`
- Returned `{. .}` as `cv28` #875 #635 #409 #279 #264 #214
- Alternative `{ }` `cv29`
- Returned full ligatures for `F l` `T l` `f i` `f j` `f l` `f t` as `ss10`
- Alternative `()` `cv31` #1198

5.2 (June 12, 2020)

- Fixed hinting problems caused by `build_ttf` #1075

5.1 (June 10, 2020)

- Fixed monospace property broken by adding `threeemdash` #1073

5.0 (June 8, 2020)

- Fixed Box drawing diagonal lines `U+2571` `/` `U+2572` `\` `U+2573` `X` #929
- Added `U+2236` Ratio `:` #926
- Added `U+2E3A` 2-em dash `—`, `U+2E3B` 3-em dash `---` #1019
- Fixed arrows next to lowercase letters #1049 #1059
- Vertically-aligned colons, greater/less signs #980 #1061
- Make `U+2388` Helm Symbol `*` single-width #1036
- Disable `=/` because of conflicts with paths `PATH=/...` #1056
- Fixed STAT table in `FiraCode-VF.ttf` #770 #1054
- Added `//=` `==` `==` `==` #816
- Added `U+21B0..U+21B3` `↰` `↱` `↲` `↳`, `U+2770..U+2771` `⬅` `➡` #1032
- Fixed `U+27F8` `⇐` `U+27F9` `⇒` `U+27FA` `⇔` `U+27FD` `⇐` `U+27FE` `⇒` `U+27FF` `↔` that were broken in v4 #1067
- Added `ss08` that adds gaps to `==` `===` `!=` `!=='` #187 #383
- Removed OTF from `distr` to avoid confusion #939

4.0 (May 18, 2020)

Removed 44 individual arrow ligatures, replaced with four universal, combinative substitutions. 100-150% faster shaping performance, infinite amount of arrow combinations.

- Arbitrary-long combinative hyphen-based arrows #346 #494 #713 #826 #968 #983 #1029
- Arbitrary-long combinative equal-based arrows #229 #234 #346 #494 #698 #826 #919 #931 #946 #948 #968 #1016 #1018 #1022
- Arbitrary-long underscores #120 #269 #346 #494
- Arbitrary-long numbersign sequences #1014
- Fixed descender in `U+040F` `Ѳ`
- Undid #995 and properly fixed `U+04CB` `ѣ`, `U+04CC` `Ѥ` #1001 and `U+0449` `ѹ` #1007
- Added `|||` to prevent partial ligatures in `|||-|||` `|||=|||` #346

3.1 (April 15, 2020)

- Fixed width of Germandbls, cornerbracketleft, cornerbracketleft, negativeAcknowledge-control, cornerbracketleft.half, cornerbracketright.half [#1000]
- Fixed misplaced descenders on U+04B3 \times U+04CB φ and U+04CC φ [#995]
- Fixed U+03F4 \ominus [#996]
- Fixed U+0314 COMBINING REVERSED COMMA ABOVE [#997]

3.0 (April 9, 2020)







































- Disabled ligatures in progress bars $[-> [-> [-> [=> [=> [=>]$ [#968]
- Added set letters U+2102 \mathbb{C} U+210D \mathbb{H} U+2115 \mathbb{N} U+2119 \mathbb{P} U+211A \mathbb{Q} U+211D \mathbb{R} U+2124 \mathbb{Z} and U+1D539 \mathbb{B} [#841]
- Removed ? : [#970]
- Added missing set operations U+2200 \forall U+2203..U+2205 $\exists \nexists \emptyset$ U+2207 ∇ U+2282..U+228B $\subset \supset \not\subset \not\supset \subseteq \supseteq \subsetneq \supsetneq \subseteq \supseteq$ U+2208..U+220F $\in \notin \epsilon \ni \ni \ni$ U+222A \cup [#822]
- Added U+300C U+300D Corner brackets $\lceil \rceil$ and U+FF62 U+FF63 Halfwidth Corner brackets $\lceil \rceil$ [#940]
- Added $\llcorner \lrcorner$ [#919]
- Disabled fl Fl Tl ligatures, adjusted l height in combination with [F T I f] instead [#902]
- Added U+25A4..25A9 Squares with fill $\blacksquare \blacksquare \blacksquare \blacksquare \blacksquare \blacksquare$ [#450]
- Slightly tuned multiple ampersands in ss03 [#831]
- Fixed horizontal bar height in <!-- [#917]
- Fixed multiply sign in 0xFF and 10x10 with combination of onum and zero [#888]
- Fixed dollar sign in $\text{<\$ \$> <\$>}$ when ss04 is active [#830]
- Removed ss19 and ss20 (they are covered by zero and onum)
- Added $\text{=}\sim$ and $\text{!}\sim$ to ss07 [#293]
- Removed \sim = [#381]
- Re-added ..= with just a subtle spacing adjustment [#934]
- Added U+2630..U+2637 $\equiv \equiv \equiv \equiv \equiv \equiv \equiv$ (Bagua trigrams) [#859]
- Disabled $\text{<?} = (? = \text{ after } <)$ [#850]
- Added SemiBold weight [#987]
- Replaced single LIG with per-glyph $\text{*}.\text{spacer}$

2.0 (September 9, 2019)

- Characters U+25DE \curvearrowright and U+25DF \curvearrowleft were swapped [#761]
- Added Box Drawing Light Arcs U+256D \curvearrowright U+256E \curvearrowleft U+256F \curvearrowright U+2570 \curvearrowleft [#349] [#702] [#714] [#725]
- Added Mathematical Angle Brackets U+27E8 \langle U+27E9 \rangle [#763]
- Added Light and heavy dashed lines U+2504..U+250B $----- | | \cdots | |$ [#702]
- Adjusted Box drawings double dashes U+254C..U+254F $----- | |$
- Fixed outlines of U+04FA \mathfrak{F} and U+04FB \mathfrak{F} [#806]
- Added Not identical to U+2262 $\equiv/$ [#396]
- Added Latin Capital Letter Sharp S U+1E9E \mathfrak{B} [#587]
- Tuned position and width of U+2044 Fraction Slash </ [#588] and U+2215 Division Slash </ [#805]
- Added U+1405 Canadian Syllabics O > and U+140A Canadian Syllabics A < [#666]
- Added U+2234 Therefore \therefore and U+2235 Because \because [#669]
- Added U+239B..U+23AD multi-line brackets [#675]

$$\left(\begin{array}{c} 1 \\ 2 \\ 3 \end{array} \right) \left[\begin{array}{c} a \\ b \\ c \end{array} \right] \left(\begin{array}{c} x \\ y \\ z \end{array} \right)$$

$$\begin{pmatrix} 4 \\ 5 \end{pmatrix} \begin{pmatrix} d \\ e \end{pmatrix} \begin{pmatrix} y \\ x \end{pmatrix}$$

- Added U+27F0..U+27FF Supplemental Arrows-A                 [#677]
- Added U+2400..U+2426 Control Pictures
ACK BS BEL  CAN CR DLEDEL  DC4DC1DC3DC2 EM ETXEOTETBENQESC FS FF GS HT LF NAK NL NUL RS SI SO SP SOHSTXSUB  SYN US VT [#764]
- Added U+2388 Helm Symbol  [#766]
- Added U+2016 Double Vertical Line  [#780]
- Tuned metrics (1870,-530 -> 1800,-600, upm 2000 -> 1950, hopefully fix [#241] [#252] [#459] [#552] [#798])
- Box characters to not overflow line height, taller  [#449]
- Added few technical symbols [#799]:
 - U+21A9 Leftwards arrow with hook (Return) 
 - U+21DE Upwards arrow with double stroke (Page Up) 
 - U+21DF Downwards arrow with double stroke (Page down) 
 - U+21E4 Left Tab Arrow 
 - U+21E5 Right Tab Arrow 
 - U+2300 Diameter sign 
 - U+2303 Up Arrowhead (Control) 
 - U+2304 Down Arrowhead 
 - U+2305 Projective 
 - U+2306 Perspective 
 - U+2318 Place of interest sign (Command) 
 - U+2324 Up Arrowhead between two horizontal bars 
 - U+2325 Option Key 
 - U+2387 Alternative Key Symbol 
 - U+238B Broken Circle with Northwest Arrow (Escape) 
 - U+23CF Eject symbol 
- Added Coq logical and  and logical or  ligatures, U+2227  and U+2228  [#191] [#488] [#738] [#810]
- Added SystemVerilog   and   for symmetry [#695]
- Added Forces  ligature and U+22A2..U+22AF              [#709]
- Added    ligatures, adjusted   pairs [#795]
- Disabled ligatures after regexp lookahead/lookbehinds         

1.207 (April 6, 2019)

- Variable TTF, cleaned up [many small Light weight errors](#) (done by @thundernixon, PR #735)
- Dropped EOF which were only useful for IE 6-11
- Fixed different vertical position of `<=` `>=` in Light and Bold caused during [#483]

1.206 (September 30, 2018)

- Added `<==>` ([#392]), `#:` ([#642]), `!!.` ([#618]), `>:` `:<` ([#605]), U+0305 Combining overline ([#608]), U+2610 Ballot box, U+2611 Ballot box with check, U+2612 Ballot box with x ([#384])
- Fixed incorrect width of `[**` ([#607])
- Redrew `{ | }` `[|]` ([#643])
- Removed `{ . }` ([#635]), thin backslash ([#577])
- Disabled ligatures in `(?=` `(?<=` `(?:` ([#624]), `>=<` ([#548]), `{ | }` `[|]` ([#593])
- Fixed ligatures precedence in `<| |>` ([#621]), `:>=` ([#574]), `<<*>>` `<<<*>>>` `<<+>>` `<<<+>>>` `<<$>>` `<<<$>>>` ([#410]), `!=<` ([#276])
- Fixed incorrectly swapped box drawing characters `┌` and `┐` ([#595])
- Adjusted vertical position of `<=` `>=` to align with `<` `>` ([#483])

1.205 (February 27, 2018)

- Slashed zero by default ([#481] [#342])
- Adjusted vertical position of colon `:` near `{ [() }` ([#486])
- Thin backslash except when in `\\`, removed `\\\` ([#536])
- Added `:>` ([#547]) and `<:` ([#525])
- Removed `=<` ([#479] [#468] [#424] [#406] [#355] [#305])
- Added `: :=` ([#539])
- Added `[|]` ([#516]) `{ | }` ([#330])
- Added `✓` (U+2713)
- Added `..=` ([#433])
- Added `!=` ([#338])
- Added `| -` `- |` `_ | _` and adjusted `| =` `| | =` ([#494])
- Added `# =` ([#208])

1.204 (November 6, 2016)

- Added `▴` (black right-pointing triangle) and `▾` (black left-pointing triangle) ([#289](#))
- Changed look of Markdown headers `##` `###` `####` to make them easier to tell apart ([#287](#))
- Fixed BBEdit incorrectly applying ligatures after tab ([#274](#))
- Returned Nim pragmas `{ . }` `. }` ([#279](#))
- Added Unicode increment `U+2206` ([#174](#), [#298](#))
- Added fish operators `>->` `<-<` ([#297](#))
- Added safe navigation operators `?.` `?.?` `?:` ([#215](#))
- Added `<~>` ([#179](#), used in IntelliJ for collapsed methods)
- Added F# piping operators `| |>` `| | |>` `< | |` `< | | |` ([#184](#))
- Added shebang `#!` ([#169](#), [#193](#))

1.203 (September 17, 2016)

- Added `___` ([#120](#), [#269](#))

1.202 (September 17, 2016)

- Removed `{ . }` `[. .]` `(. .)` ([#264](#))

1.201 (August 30, 2016)

- Removed `[]` (#92) `{- -}` (#248)
- Removed `/** */` and disabled ligatures for `/* /` `*/ *` sequences (#219 #238)
- Added `]#` `{. .}` `[. .]` `(. .)` (#214)

1.200 (July 18, 2016)

- Removed `!!!` `???` `;;;` `&&&` `|||` `=~` #167 `~~~` `%%%`
- New safer `calt` code that doesn't apply ligatures to long sequences of chars, e.g. `!!!!` , `>>>>` , etc (#49, #110, #176)
- Larger `+` `-` `*` and corresponding ligatures (#86)
- Hexadecimal `x` (`0xFF`) is now applied to sequences like `128x128` as well (#161)
- Added twoTurned (U+218A) and threeTurned (U+218B) (#146)
- Added whiteFrowningFace (U+2639) (#190)
- Simplified visual style on markdown headers `##` `###` `####` (#107)
- Added `</>` (#147)
- Provided ttf and webfonts versions (eot, woff, woff2) (#18, #24, #38, #101, #106)
- Increased spacing in `<=` `>=` (#117)

1.102

- Support for IntelliJ-based IDEs ([instructions](#))
- Turned on autohinting

1.101

- Added Light weight
- Adjusted rules when vertical centering of `:` , `-` , `*` and `+` occurs

1.100

- Fixed calt table conflicts (`----` would incorrectly render as `<!--`)
- Added centered `:` (between digits, e.g. `10:40`)
- Added lowercase-aligned `-` , `*` and `+` (only between lowercase letters, e.g. kebab case `var-name` , pointers `*ptr` etc)

1.000

Added weights:

- Retina (just slightly heavier than Regular)
- Medium
- Bold

Switched to `calt` instead of `liga` . You can now “step inside” the ligature in text editors.

Fira Code is now drawn and built in Glyphs 2 app (should improve compatibility).

Added:

`<->` `<~~` `<~` `~~~` `~>` `~~>` `<$` `<+` `<*` `*>` `+` `$>` `;;;` `:::` `!!!` `???` `%%` `%%%` `##`
`###` `####` `.-` `#_ (` `=<` `** /` `0x` `www` `[]`

Redrawn:

`{- -}` `~` `=~` `=<<` `>>=` `<$>` `<=>` `.=`

Removed: `?:`

Total ligatures count: 115

0.6

Redrawn from Fira Mono 3.204 (slightly heavier weight)

Added:

`** *** +++ -- --- ?: /= /== .= ^= =~ ?= ||= |= <<< <=< -<< -< >-`
`>>- >=> >>> <*> <|> <$> <+> <!-- {- -} /** \\ \\\ \. < ?? ||| &&& <|`
`|>`

Added support for Powerline

0.5

Added: `# { ~- ~- <== ==> /// ;; </`

0.4

- Added `~= ~~ # [`
- Rolled back `&&` and `||` to more traditional look
- `===` and `!==` are now rendered with 3 horizontal bars

0.3

Added: `~@ #? =:= =<`

0.2.1

Fixed width of `&&` and `||`

0.2

Added: `--> <-- && || ==> /=`

0.1

`>>= ==<< <<= --> -> => <<- <- === == <=> >= <= >> << !== != <> := ++`
`#(#_ :: !! // /* */ />`