Fontlog for Copto Sans Noto Sans Regular v2.004 / Noto Sans Coptic v2.000

Changes to Greek/Coptic and Coptic Blocks:

03DA ς Stigma: Drew uni03DA.salt ς to match common Greek script and typography and for reference to uni2C8A Sou.

03E2 Ϣ Shei: Adjusted anchors and width.

03E3 ω shei: Adjusted anchors and width.

03E4 q Fei: Adjusted anchors and width.

03E5 q fei: Adjusted anchors, stem depth and width.

03E6 þ Khei: Redrew. Stylized serif at bottom made character unrecognizable as Khei, and would not allow for lining dotbelowcentercomb. Was þ.

03E7 թ khei: Redrew. Stylized serif at bottom made character unrecognizable as khei, and would not allow for lining dotbelowcentercomb. Was թ.

03E8 2 Hori: Redrew to match common Coptic script and typography, with bottom descender bowl rounded and below baseline. Was 2. Created ligature for uni03E70323 2.

03E9 ટ hori: Redrew to match common Coptic script and typography, with bottom descender bowl rounded and below baseline. Was ૄ. Created ligature for uni03E70323 ટ્ર.

03EA X Gangia: Adjusted anchors and width.

03EB x gangia: Adjusted anchors and width.

03EC б Shima: Referenced to uni0431be. Adjusted anchors. Was б.

03ED 6 shima: Redrew to match common Coptic script and typography, top matching x-height and distinguishable from sigma. Was ஏ.

03EE † Dei: Adjusted width, anchors, stem height and depth. Was †.

03EF † dei: Adjusted width, anchors, stem height and depth. Was †.

2C80 λ Alfa: Adjusted anchors and width. *I may* redraw with a rounded bowl, but it is a distinct font identifier.

2C81 a alfa: Adjusted anchors and width. *I may redraw with a rounded bowl, but it is a distinct font identifier.* 

2C82 B Vida: Referenced to uni0412 Ve (which is referenced to uni0042 B. Adjusted anchors. Was B.

2С83 в vida: Adjusted anchors and width.

2C84  $\Gamma$  Gamma: Referenced to uni0393 Gamma. Adjusted anchors. Was  $\Gamma$ .

2C85 г gamma: Referenced to uni0433 ghe. Adjusted anchors. Was г.

2C86 Δ Dalda: Adjusted anchors and width.

2C87 م dalda: Adjusted anchors and width.

2C88  $\in$  Eie: Referenced to uni0404 Ie. Adjusted anchors. Was  $\in$ .

2C89  $\epsilon$  eie: Referenced to uni0454 ie. Adjusted anchors. Was  $\epsilon$ .

2C8A S Sou: Referenced to uni03DA.salt Stigma. Adjusted anchors. Was S.

2C8B ς sou: Referenced to uni03DB stigma. Adjusted anchors. Was ς. Created ligature for uni02C8B0323 ς.

2C8C Z Zata: Referenced to uni0396 Zeta (which is referenced to uni0412 Z. Adjusted anchors. Was Z.

2C8D z zata: Redrew to match updated 2C8C. Adjusted width. Was z.

2C8E H Hate: Referenced to uni041D En. Adjusted anchors. Was H.

2C8F н hate: Referenced to uni043D en. Adjusted anchors. Was н.

2C90 Θ Thethe: Referenced to uni0472 Fita. Adjusted anchors. Was Θ.

2C91 e thethe: Referenced to uni0473 fita. Adjusted anchors. Was e.

2C92 | Iauda: Referenced to uni0049.salt - I.salt. Adjusted anchors. Was I.

2C93 i iauda: Referenced to uni0131 dotlessi. Adjusted anchors. Was i.

2C94 K Kapa: Referenced to uni041A Ka. Adjusted anchors. Was K.

2C95 κ kapa: Referenced to uni043A ka. Adjusted anchors. Was κ.

2C96  $\lambda$  Laula: Referenced to uni03BB lamda. Adjusted anchors. Was  $\lambda$ .

2C97 λ laula: Redrew to match common Coptic script and typography, top higher than x-height. Was λ. *Note:* some combining characters do conflict with glyph and require ligatures. Also conflicts with shima.

## λλλλλλλ

Created uni2C97.salt  $\lambda$  for this purpose.

2C98 M Mi: Adjusted anchors and width.

2C99 µ mi: Adjusted anchors and width. *Bowl may* need to be raised.

2C9A N Ni: Referenced to uni039D Nu. Adjusted anchors. Was N.

2C9B ν ni: Imported as flipped uni0438 icyrillic. Adjusted anchors. Was ν.

2C9C 3 Ksi: Adjusted anchors and width.

2C9D 3 ksi: Adjusted anchors and width.

2C9E O Ocoptic: Referenced to uni041E Ocyrillic. Adjusted anchors. Was O.

2C9F o ocoptic: Referenced to uni043E ocyrillic. Adjusted anchors. Was o.

2CA0  $\Pi$  Picoptic: Referenced to uni041F Pe. Adjusted anchors. Was  $\Pi$ .

2CA1 п picoptic: Referenced to uni043F pe. Adjusted anchors. Was п.

2CA2 P Ro: Referenced to uni0420 Er. Adjusted anchors. Was P.

2CA3 p ro: Redrew. *This glyph needs more work. It is also slightly too bold.* Was p.

2CA4 C Sima: Referenced to uni0421 Es. Adjusted anchors. Was C.

2CA5 c sima: Referenced to uni0441 es. Adjusted anchors. Was c.

2CA6 T Taucoptic: Adjusted anchors and width.

2CA7 τ taucoptic: Adjusted anchors and width.

2CA8 Y Ua: Referenced to uni03A5 Upsilongreek. Adjusted anchors. Was Y.

2CA9  $\gamma$  ua: Redrew. Adjusted anchors. Was  $\gamma$ . Created ligature for uni02CA90323  $\gamma$ .  $\leftarrow$  *check why this isn't working.* 

2CAA  $\Phi$  Fi: Referenced to uni0424 Ef. Adjusted anchors. Was  $\Phi$ .

2CAB φ fi: Referenced to uni0444 ef. Adjusted anchors. Was φ. *Needs stems adjusted and possible dotbelow ligature.* 

2CAC X Khi: Referenced to uni0425 Ha. Adjusted anchors. Was X.

2CAD x khi: Referenced to uni0445 ha. Adjusted anchors. Was x.

2CAE  $\Psi$  Psicoptic: Redrew to match common Coptic script and typography. Was  $\Psi$ . *This glyph will need ligature or alt+comb substitutes.* Created uni2CAE.salt  $\Psi$  for this purpose

2CAF Ψ psicoptic: Redrew to match common Coptic script and typography. Was Ψ. *This glyph will need ligature or alt+comb substitutes.* Created uni2CAF.salt Ψ for this purpose

2CB0 W Oou: Adjusted anchors and width.

2CB1  $\omega$  oou: Adjusted anchors and width.

More similar changes follow through 2CFF I have not documented here yet.

Changes to Noto Sans 2.04:

012A.salt I Imacron aalt: Edited macron to refer to uni0304.narrow to avoid conjoining with adjacent narrow characters, See 012B I imacron. Added as a ligature for uni2C92+uni0304.

012B i imacron: Edited macron to refer to uni0304.narrow to avoid conjoining with adjacent narrow characters, *This is an unreported issue in Noto Sans.* Added as a ligature for uni2C93+uni0304.

## iii instead of iii

0304 ā macroncombining: Created narrow version uni0304.narrow. In Coptic this is only necessary for uni2C92/2C93 Iauda/iauda. See 012B ī imacron.

035E → doublemacroncombiniing: Moved to match height and thickness of uni0304 and uniFE26, added Coptic anchor at left side for use as used for Coptic texts.

1FD9.salt la lotamacron aalt: Edited macron to refer to uni0304.narrow to avoid conjoining with adjacent narrow characters, See 012B i imacron.

FE24  $\bar{}$  combiningmacronlefthalf: Moved to match height and thickness of uni0304 and uniFE26, added Coptic anchor at left side for use as used for Coptic texts. Lengthened to work as used in Coptic with most character widths ( $\bar{\Gamma}$  through  $\bar{X}$ ).  $\bar{U}\bar{U}\bar{U}\bar{U}$ , and  $\bar{I}\bar{I}\bar{I}$  require ligatures or calt/ccmp (may not be necessary, low impact).  $\bar{U}\bar{X}\bar{U}\bar{U}$  works as drawn, as does  $\bar{\Gamma}\bar{\Gamma}\bar{\Gamma}$ .

FE25  $\bar{c}$  combiningmacronrighthalf: Moved to match height and thickness of uni0304 and uniFE26, added Coptic anchor at right side for use as used for Coptic texts. Lengthened to work as used in Coptic with most character widths ( $\bar{c}$  through  $\bar{c}$ ).  $\bar{c}$   $\bar{c}$ 

FE26  $\overline{\ }$  combiningconjoiningmacron: Moved to match height and thickness of uni0304 and uniFE24/FE25, added Coptic anchor at right side for use as used for Coptic texts. Lengthened to work as used in Coptic with most character widths ( $\overline{\ }$  through  $\overline{\ }$ ).  $\overline{\ }$  $\overline{$ 

FFE3 macron fullwidth: Created zero-width combining version uniFFE3.combiningconjoining. Added as a

substitute for macron combining conjoining for wider characters.

Issues found with Noto Sans Regular:

Kerning for a following x and h. a is too far right in the following examples: hate hat haberdash happy example.

Accented narrow glyphs with uni0304 may conjoin adjacent characters.

Issues 653 and 1394 pop up badly in coptic. The band-aid alternate combiningconjoiningmacron.xxxlarge and combiningconjoiningmacron.xxxxxsupersmallcap solution with 48 or so extra code points should be revisited for a different solution.

To Do List:

Finish working characters 2CB2 through 2CFF

Fix overlines uni0305, uni033F, and create basemark to use combinations to represent millions.

Tweak Dei and dei uni03EE / 03EF

Redraw uni2CA3 rhocoptic

Redraw 2CAB φ fi stemdepth

ligatures for 2CAE using Ψ Psicoptic.salt

ligatures for 2CAF using  $\psi$  psicoptic.salt

Check and anchor combining characters uni2CEF, 2CF0 and 2CF1

Test diacritics (uni0300, 0301, 0302, 0305, 0307, 0308, 0311, 0323, 035E, FE24, FE25, FE26)

Work on epact numbers and uni0605 (from Arabic)