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 as an alternate to match common Greek script.

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. Khei as commonly used: ந. Was þ.

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

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

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 σ shima: Adjusted anchors and width, performed minor tweaks to glyph and extended beyond width bounding box. Was σ.

03EE † Dei: Adjusted width, anchors, stem height and depth. Was 1. Needs ligatures.

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

2C80 λ Alfa: Adjusted anchors and width.

2C81 a alfa: Adjusted anchors and width.

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 Γ Gamma: Referenced to uni0393 Gamma. Adjusted

anchors. Was Γ.

2С85 г gamma: Referenced to uni0433 ghe. Adjusted

anchors. Was г.

2C86 Δ Dalda: Adjusted anchors and width.

2C87 a dalda: Adjusted anchors and width.

2C88 € Eie: Referenced to uni0404 Ie. Adjusted

anchors. Was E.

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

anchors. Was ε.

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

2C8B εsou: This is exclusively the number 6 in modern usage, and is drawn as the Epact numeral with overline  $\overline{\epsilon}$ , redrew from scaled uni102E6. Created ligature uni2CB80305  $\overline{\epsilon}$ . Was  $\varsigma$ . Added ε as 2C8B.salt for historic text processing. Created ligature uni02C8B0323  $\varsigma$ . Sample 2C8B.salt as numeral in Psalm 118 Sahidica:  $\varsigma - 0$ γαγ ματαν20Ι 2ΝΤΕΚΔΙΚΔΙΟCΥΝΗ ΝΤΕΠΕΚΝΆ ΕΙ ΕΖΡΑΙ ΕΧϢΙ ΠΧΟΕΙC ΠΟΥΧΑΙ ΜΝΠΕΚϢΑΧΕ

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 θ thethe: Referenced to uni0473 fita. Adjusted anchors. Was θ.

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

uni2C92FE26 lauda with combining conjoining macron: Created ligature using old uni012A Imacron.salt for Iauda+uniFE26. Also referenced as ligature for I.salt+uniFE26 and Iota.salt+uniFE26.

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

uni0069FE26 ī iauda with combining conjoining macron: Created ligature using old uni012B imacron for iauda+uniFE26. Also referenced as ligature for i+ uniFE26, iota+ uniFE26 and iotalatin+uniFE26.

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. May conflict with some other glyphs.

## λλλλλλλ

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

2C98 M Mi: Adjusted anchors and width.

2C99 ม mi: Re-drew with rounded shoulders to better emulate commonly used form ₦ Adjusted width and anchors. Was ม.

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

2C9B N ni: Redrew from uni043A icyrillic. Adjusted anchors. Was N.

2C9C 및 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 Rhocoptic: Referenced to uni0420 Er. Adjusted anchors. Was P.

2CA3 rhocoptic: Needs work.

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 γ ua: Adjusted anchors and width. Drew alternate form from uni1D25 ain to match commonly used coptic script uni2CA9.salt γ. Commonly used ua variant: γ. Created ligature uni2CA90323 for dotbelowcomb γ.

2CAA  $\Phi$  Fi: Redrew to match common Coptic script and typography, which differs slightly from Greek and Cyrillic with an open terminal. Fi as commonly used:  $\Phi$ . Adjusted anchors. Was  $\Phi$ .

2CAB φ fi: Redrew to match common Coptic script and typography, which differs slightly from Greek and Cyrillic with an open terminal. fi as commonly used: φ. Adjusted anchors. Was φ.

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: Referenced to uni0470 Psicyrillic. Was  $\Psi$ .

2CAF  $\psi$  psicoptic: Referenced to uni0471 psicyrillic. Was  $\psi$ . Created uni2CAF.salt  $\psi$ . This glyph will need ligatures.

2CB0 W Oou: Adjusted anchors and width.

2CB1 ω 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.

200B : Zero-width joiner: Added for use as combining character to unlock width on some composite characters.

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

FE25  $\ \, \overline{} \ \,$  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 all character widths save Iauda and iauda.  $\overline{\Gamma\Gamma\Gamma}$  through  $\overline{\Omega}\overline{\Omega}\overline{\Omega}$ . Created ligature for Iauda and iauda I and I,  $\overline{\Pi}$ .

FE26  $\overline{\phantom{a}}$  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 all character widths save Iauda and iauda.  $\overline{rrr}$  through  $\overline{WWW}$ . Created ligature for Iauda and iauda I and I,  $\overline{\Pi}$ I.

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.

To Do List:

Uni0305 / 033F and thousands ligature

Finish working characters 2CB2 through 2CFF

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

Ligatures for diacritics Dei dei, laula, fi, psi 03EE, 03EF, 2C97, 2CAB, 2CAF

Redraw uni2CA3 rhocoptic

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)