

Ethiopic Character Composition for Latin Keyboards

This document is not intended to be a comprehensive reference on Ethiopic IM it is offered in the hope that it might be helpful for those wishing to implement an Ethiopic IM. The key sequences detailed here are those of the SERA-IM model employed in Multilingual Emacs and elaborated further on by ያዕቆብ and ፍሰሃ¹.

Two tables are given. The first is character code ordered as per Unicode. The second table follows Unicode for syllabic series then orders characters in an “event sequence” ordering. That is, in the sequence that the user would experience glyph changes on the screen as s/he is keying them in.

Issues of deletion, infinite numeric input, gemination, SERA and efficiency are not discussed herein. Regular expression notation is used to save table space where [mM] + u is equivalent to m + u and M + u. The first character in the square brackets indicates the expected user preference (m vs M).

Address Ordered Ethiopic IM Table

Sequence	Character	Unicode Address
h + e	ሀ	U+1200
h + u	ሁ	U+1201
h + i	ሂ	U+1202
h + a	ሃ	U+1203
h + E	ሄ	U+1204
h	ሀ	U+1205
h + o	ህ	U+1206
h + W	ሁ	U+128B
h + W + a	ሁ	U+128B
h + W + e	ኡ	U+1288
h + W + u	ኢ	U+128D
h + W + i	ኣ	U+128A
h + W + E	ኤ	U+128C
h + W + '	ኦ	U+128D
[lL] + e	ለ	U+1208
[lL] + u	ሉ	U+1209
[lL] + i	ሊ	U+120A
[lL] + a	ላ	U+120B
[lL] + E	ሌ	U+120C
[lL]	ል	U+120D
[lL] + o	ሎ	U+120E
[lL] + W	ሏ	U+120F
[lL] + W + a	ሏ	U+120F
H + e	ሐ	U+1210
H + u	ሑ	U+1211
H + i	ሒ	U+1212
H + a	ሓ	U+1213
H + E	ሔ	U+1214
H	ሐ	U+1215
H + o	ሑ	U+1216
H + W	ሑ	U+1217
H + W + a	ሑ	U+1217
[mM] + e	መ	U+1218
[mM] + u	ሙ	U+1219
[mM] + i	ሚ	U+121A
[mM] + a	ሜ	U+121B
[mM] + E	ሚ	U+121C
[mM]	ሞ	U+121D
[mM] + o	ሞ	U+121E
[mM] + W + e	መ	U+????
[mM] + W + u	ሙ	U+????

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¹IM Principles for an Ethiopic Text Editor
<ftp://ftp.cs.indiana.edu/pub/fidel/sera-docs/sera-im.ps>

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[mM] + W + i	ም	U+????
[mM] + W	ሚ	U+121F
[mM] + W + a	ሚ	U+121F
[mM] + W + E	ሚ	U+????
[mM] + W + '	ም	U+????
[mM] + Y	ሚ	U+1358
[mM] + Y + a	ሚ	U+1358
' + s + e	ሠ	U+1220
' + s + u	ሠ	U+1221
' + s + i	ሢ	U+1222
' + s + a	ሢ	U+1223
' + s + E	ሢ	U+1224
' + s +	ሥ	U+1225
' + s + o	ሥ	U+1226
' + s + W	ሢ	U+1227
' + s + W + a	ሢ	U+1227
s + [s2] + e	ሠ	U+1220
s + [s2] + u	ሠ	U+1221
s + [s2] + i	ሢ	U+1222
s + [s2] + a	ሢ	U+1223
s + [s2] + E	ሢ	U+1224
s + [s2]	ሥ	U+1225
s + [s2] + o	ሥ	U+1226
s + [s2] + W	ሢ	U+1227
s + [s2] + W + a	ሢ	U+1227
[rR] + e	ረ	U+1228
[rR] + u	ሩ	U+1229
[rR] + i	ሪ	U+122A
[rR] + a	ሪ	U+122B
[rR] + E	ሪ	U+122C
[rR]	ረ	U+122D
[rR] + o	ረ	U+122E
[rR] + W	ረ	U+122F
[rR] + W + a	ረ	U+122F
[rR] + Y	ረ	U+1359
[rR] + Y + a	ረ	U+1359
s + e	ሰ	U+1230
s + u	ሰ	U+1231
s + i	ሰ	U+1232
s + a	ሰ	U+1233
s + E	ሰ	U+1234
s	ሰ	U+1235
s + o	ሰ	U+1236
s + W	ሰ	U+1237
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s + W + a	ሰ	U+1237
x + e	ሰ	U+1238
x + u	ሰ	U+1239
x + i	ሰ	U+123A
x + a	ሰ	U+123B
x + E	ሰ	U+123C
x	ሰ	U+123D
x + o	ሰ	U+123E
x + W	ሰ	U+123F
x + W + a	ሰ	U+123F
q + e	ቀ	U+1240
q + u	ቀ	U+1241
q + i	ቀ	U+1242
q + a	ቀ	U+1243
q + E	ቀ	U+1244
q	ቀ	U+1245
q + o	ቀ	U+1246
q + W + e	ቀ	U+1248
q + W + u	ቀ	U+124D
q + W + i	ቀ	U+124A
q + W	ቀ	U+1240
q + W + a	ቀ	U+124B
q + W + E	ቀ	U+124C
q + W + '	ቀ	U+124D
' + q + e	ቀ	U+????
' + q + u	ቀ	U+????
' + q + i	ቀ	U+????
' + q + a	ቀ	U+????
' + q + E	ቀ	U+????
' + q	ቀ	U+????
' + q + o	ቀ	U+????
q + 2 + e	ቀ	U+????
q + 2 + u	ቀ	U+????
q + 2 + i	ቀ	U+????
q + 2 + a	ቀ	U+????
q + 2 + E	ቀ	U+????
q + 2	ቀ	U+????
q + 2 + o	ቀ	U+????
Q + e	ቀ	U+????
Q + u	ቀ	U+1251
Q + i	ቀ	U+1252
Q + a	ቀ	U+1253
Q + E	ቀ	U+1254
Q	ቀ	U+1255
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Q + o	ቆ	U+1256
Q + W + e	ቆኤ	U+1258
Q + W + u	ቆኡ	U+125D
Q + W + i	ቆኢ	U+125A
Q + W	ቆከ	U+125B
Q + W + a	ቆከኦ	U+125B
Q + W + E	ቆከኤ	U+125C
Q + W + ’	ቆከኡ	U+125D
[bB] + e	ቆበ	U+1260
[bB] + u	ቆቡ	U+1261
[bB] + i	ቆቢ	U+1262
[bB] + a	ቆባ	U+1263
[bB] + E	ቆቤ	U+1264
[bB]	ቆብ	U+1265
[bB] + o	ቆቦ	U+1266
[bB] + W + e	ቆቦኤ	U+????
[bB] + W + u	ቆቦኡ	U+????
[bB] + W + i	ቆቦኢ	U+????
[bB] + W	ቆቦከ	U+1267
[bB] + W + a	ቆቦከኦ	U+1267
[bB] + W + E	ቆቦከኤ	U+????
[bB] + W + ’	ቆቦከኡ	U+????
[vV] + e	ቆቨ	U+1268
[vV] + u	ቆቡከ	U+1269
[vV] + i	ቆቢከ	U+126A
[vV] + a	ቆባከ	U+126B
[vV] + E	ቆቤከ	U+126C
[vV]	ቆቦከ	U+126D
[vV] + o	ቆቦከኦ	U+126E
[vV] + W	ቆቦከኡ	U+126F
[vV] + W + a	ቆቦከኡኦ	U+126F
t + e	ቆተ	U+1270
t + u	ቆቲ	U+1271
t + i	ቆቲኢ	U+1272
t + a	ቆቲኦ	U+1273
t + E	ቆቲኤ	U+1274
t	ቆቲከ	U+1275
t + o	ቆቲኦከ	U+1276
t + W	ቆቲከከ	U+1277
t + W + a	ቆቲከከኦ	U+1277
c + e	ቆቲከከኤ	U+1278
c + u	ቆቲከከኡ	U+1279
c + i	ቆቲከከኢ	U+127A
c + a	ቆቲከከኦ	U+127B
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c + E	ቆቲከከኤ	U+127C
c	ቆቲከከኡ	U+127D
c + o	ቆቲከከኦ	U+127E
c + W	ቆቲከከከ	U+127F
c + W + a	ቆቲከከከኦ	U+127F
’ + h + e	ቆቲከከከኤ	U+1280
’ + h + u	ቆቲከከከኡ	U+1281
’ + h + i	ቆቲከከከኢ	U+1282
’ + h + a	ቆቲከከከኦ	U+1283
’ + h + E	ቆቲከከከኤ	U+1284
’ + h	ቆቲከከከከ	U+1285
’ + h + o	ቆቲከከከከኦ	U+1286
’ + h + We	ቆቲከከከከኤ	U+1288
’ + h + W + u	ቆቲከከከከኡ	U+128D
’ + h + W + i	ቆቲከከከከኢ	U+128A
’ + h + W	ቆቲከከከከከ	U+128B
’ + h + W + a	ቆቲከከከከከኦ	U+128B
’ + h + W + E	ቆቲከከከከከኤ	U+128C
’ + h + W + ’	ቆቲከከከከከኡ	U+128D
h + [h2] + e	ቆቲከከከከኤ	U+1280
h + [h2] + u	ቆቲከከከከኡ	U+1281
h + [h2] + i	ቆቲከከከከኢ	U+1282
h + [h2] + a	ቆቲከከከከኦ	U+1283
h + [h2] + E	ቆቲከከከከኤ	U+1284
h + [h2]	ቆቲከከከከከ	U+1285
h + [h2] + o	ቆቲከከከከከኦ	U+1286
h + [h2] + W + e	ቆቲከከከከከኤ	U+1288
h + [h2] + W + u	ቆቲከከከከከኡ	U+128D
h + [h2] + W + i	ቆቲከከከከከኢ	U+128A
h + [h2] + W	ቆቲከከከከከከ	U+128B
h + [h2] + W + a	ቆቲከከከከከከኦ	U+128B
h + [h2] + W + E	ቆቲከከከከከከኤ	U+128C
h + [h2] + W + ’	ቆቲከከከከከከኡ	U+128D
n + e	ቆቲከከከከከኤ	U+1290
n + u	ቆቲከከከከከኡ	U+1291
n + i	ቆቲከከከከከኢ	U+1292
n + a	ቆቲከከከከከኦ	U+1293
n + E	ቆቲከከከከከኤ	U+1294
n	ቆቲከከከከከከ	U+1295
n + o	ቆቲከከከከከከኦ	U+1296
n + W	ቆቲከከከከከከከ	U+1297
n + W + a	ቆቲከከከከከከከኦ	U+1297
N + e	ቆቲከከከከከከኤ	U+1298
N + u	ቆቲከከከከከከኡ	U+1299
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N + i	ኘ	U+129A
N + a	ኘ	U+129B
N + E	ኘ	U+129C
N	ኘ	U+129D
N + o	ኘ	U+129E
N + W	ኘ	U+129F
N + W + a	ኘ	U+129F
e	ኘ	U+12A0
[uU]	ኘ	U+12A1
i	ኘ	U+12A2
[aA]	ኘ	U+12A3
E	ኘ	U+12A4
I	ኘ	U+12A5
[oO]	ኘ	U+12A6
e + a	ኘ	U+12A7
e + e + e	ኘ	U+12A7
k + e	ኘ	U+12A8
k + u	ኘ	U+12A9
k + i	ኘ	U+12AA
k + a	ኘ	U+12AB
k + E	ኘ	U+12AC
k	ኘ	U+12AD
k + o	ኘ	U+12AE
k + W + e	ኘ	U+12B0
k + W + u	ኘ	U+12B0
k + W + i	ኘ	U+12B0
k + W	ኘ	U+12B0
k + W + a	ኘ	U+12B0
k + W + E	ኘ	U+12B0
k + W + '	ኘ	U+12B0
' + k + e	ኘ	U+12B0
' + k + u	ኘ	U+12B0
' + k + i	ኘ	U+12B0
' + k + a	ኘ	U+12B0
' + k + E	ኘ	U+12B0
' + k	ኘ	U+12B0
' + k + o	ኘ	U+12B0
k + 2 + e	ኘ	U+12B0
k + 2 + u	ኘ	U+12B0
k + 2 + i	ኘ	U+12B0
k + 2 + a	ኘ	U+12B0
k + 2 + E	ኘ	U+12B0
k + 2	ኘ	U+12B0
k + 2 + o	ኘ	U+12B0
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K	ኘ	U+12B8
K + e	ኘ	U+12B9
K + u	ኘ	U+12BA
K + i	ኘ	U+12BB
K + a	ኘ	U+12BC
K + E	ኘ	U+12BD
K + o	ኘ	U+12BE
K + e	ኘ	U+12C0
K + u	ኘ	U+12C5
K + W + i	ኘ	U+12C2
K + W	ኘ	U+12C3
K + W + a	ኘ	U+12C3
K + W + E	ኘ	U+12C4
K + W + '	ኘ	U+12C5
X + e	ኘ	U+12C5
X + u	ኘ	U+12C5
X + i	ኘ	U+12C5
X + a	ኘ	U+12C5
X + E	ኘ	U+12C5
X	ኘ	U+12C5
X + o	ኘ	U+12C5
[wW] + e	ኘ	U+12C8
[wW] + u	ኘ	U+12C9
[wW] + i	ኘ	U+12CA
[wW] + a	ኘ	U+12CB
[wW] + E	ኘ	U+12CC
[wW]	ኘ	U+12CD
[wW] + o	ኘ	U+12CE
' + e	ኘ	U+12D0
' + u	ኘ	U+12D1
' + U	ኘ	U+12D1
' + i	ኘ	U+12D2
' + a	ኘ	U+12D3
' + A	ኘ	U+12D3
' + E	ኘ	U+12D4
' + I	ኘ	U+12D5
' + o	ኘ	U+12D6
' + O	ኘ	U+12D6
e + [e2]	ኘ	U+12D0
u + [u2]	ኘ	U+12D1
U + [U2]	ኘ	U+12D1
i + [i2]	ኘ	U+12D2
a + [a2]	ኘ	U+12D3
A + [A2]	ኘ	U+12D3
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E + [E2]	ዪ	U+12D4
I + [I2]	ያ	U+12D5
o + [o2]	ዮ	U+12D6
O + [O2]	ዮ	U+12D6
z + e	ዘ	U+12D8
z + u	ዘ	U+12D9
z + i	ዘ	U+12DA
z + a	ዘ	U+12DB
z + E	ዘ	U+12DC
z	ዘ	U+12DD
z + o	ዘ	U+12DE
z + W	ዘ	U+12DF
z + W + a	ዘ	U+12DF
Z + e	ዘ	U+12E0
Z + u	ዘ	U+12E1
Z + i	ዘ	U+12E2
Z + a	ዘ	U+12E3
Z + E	ዘ	U+12E4
Z	ዘ	U+12E5
Z + o	ዘ	U+12E6
Z + W	ዘ	U+12E7
Z + W + a	ዘ	U+12E7
[yY] + e	ዮ	U+12E8
[yY] + u	ዮ	U+12E9
[yY] + i	ዮ	U+12EA
[yY] + a	ዮ	U+12EB
[yY] + E	ዮ	U+12EC
[yY]	ዮ	U+12ED
[yY] + o	ዮ	U+12EE
[yY] + W	ዮ	U+12EF
[yY] + W + a	ዮ	U+12EF
d + e	ደ	U+12F0
d + u	ደ	U+12F1
d + i	ደ	U+12F2
d + a	ደ	U+12F3
d + E	ደ	U+12F4
d	ደ	U+12F5
d + o	ደ	U+12F6
d + W	ደ	U+12F7
d + W + a	ደ	U+12F7
D + e	ደ	U+12F8
D + u	ደ	U+12F9
D + i	ደ	U+12FA
D + a	ደ	U+12FB
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D + E	ደ	U+12FC
D	ደ	U+12FD
D + o	ደ	U+12FE
D + W	ደ	U+12FF
D + W + a	ደ	U+12FF
[jJ] + e	ደ	U+1300
[jJ] + u	ደ	U+1301
[jJ] + i	ደ	U+1302
[jJ] + a	ደ	U+1303
[jJ] + E	ደ	U+1304
[jJ]	ደ	U+1305
[jJ] + o	ደ	U+1306
[jJ] + W	ደ	U+1307
[jJ] + W + a	ደ	U+1307
g + e	ገ	U+1308
g + u	ገ	U+1309
g + i	ገ	U+130A
g + a	ገ	U+130B
g + E	ገ	U+130C
g	ገ	U+130D
g + o	ገ	U+130E
g + W + e	ገ	U+1310
g + W + u	ገ	U+1310
g + W + i	ገ	U+1312
g + W	ገ	U+1315
g + W + a	ገ	U+1313
g + W + E	ገ	U+1314
g + W + '	ገ	U+1315
' + g + e	ገ	U+????
' + g + u	ገ	U+????
' + g + i	ገ	U+????
' + g + a	ገ	U+????
' + g + E	ገ	U+????
' + g +	ገ	U+????
' + g + o	ገ	U+????
g + 2 + e	ገ	U+????
g + 2 + u	ገ	U+????
g + 2 + i	ገ	U+????
g + 2 + a	ገ	U+????
g + 2 + E	ገ	U+????
g + 2	ገ	U+????
g + 2 + o	ገ	U+????
G + e	ገ	U+1318
G + u	ገ	U+1319
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G + i	ገ	U+131A
G + a	ገ	U+131B
G + E	ገ	U+131C
G	ገ	U+131D
G + o	ገ	U+131E
G + W + e	ገ	U+????
G + W + u	ገ	U+????
G + W + i	ገ	U+????
G + W	ገ	U+????
G + W + a	ገ	U+????
G + W + E	ገ	U+????
G + W + '	ገ	U+????
T + e	ገ	U+1320
T + u	ገ	U+1321
T + i	ገ	U+1322
T + a	ገ	U+1323
T + E	ገ	U+1324
T	ገ	U+1325
T + o	ገ	U+1326
T + W	ገ	U+1327
T + W + a	ገ	U+1327
C + e	ገ	U+1328
C + u	ገ	U+1329
C + i	ገ	U+132A
C + a	ገ	U+132B
C + E	ገ	U+132C
C	ገ	U+132D
C + o	ገ	U+132E
C + W	ገ	U+132F
C + W + a	ገ	U+122F
P + e	ገ	U+1330
P + u	ገ	U+1331
P + i	ገ	U+1332
P + a	ገ	U+1333
P + E	ገ	U+1334
P	ገ	U+1335
P + o	ገ	U+1336
P + W	ገ	U+1337
P + W + a	ገ	U+1337
S + e	ገ	U+1338
S + u	ገ	U+1339
S + i	ገ	U+133A
S + a	ገ	U+133B
S + E	ገ	U+133C
continued on next page		

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S	ገ	U+133D
S + o	ገ	U+133E
S + W	ገ	U+133F
S + W + a	ገ	U+133F
' + S + e	ገ	U+1340
' + S + u	ገ	U+1341
' + S + i	ገ	U+1342
' + S + a	ገ	U+1343
' + S + E	ገ	U+1344
' + S	ገ	U+1345
' + S + o	ገ	U+1336
' + S + W	ገ	U+133F
' + S + W + a	ገ	U+133F
S + [S2] + e	ገ	U+1340
S + [S2] + u	ገ	U+1341
S + [S2] + i	ገ	U+1342
S + [S2] + a	ገ	U+1343
S + [S2] + E	ገ	U+1344
S + [S2]	ገ	U+1345
S + [S2] + o	ገ	U+1346
S + [S2] + W	ገ	U+133F
S + [S2] + W + a	ገ	U+133F
[fF] + e	ገ	U+1348
[fF] + u	ገ	U+1349
[fF] + i	ገ	U+134A
[fF] + a	ገ	U+134B
[fF] + E	ገ	U+134C
[fF]	ገ	U+134D
[fF] + o	ገ	U+134E
[fF] + W + e	ገ	U+????
[fF] + W + u	ገ	U+????
[fF] + W + i	ገ	U+????
[fF] + W	ገ	U+134F
[fF] + W + a	ገ	U+134F
[fF] + W + E	ገ	U+????
[fF] + W + '	ገ	U+????
[fF] + Y	ገ	U+135A
[fF] + Y + a	ገ	U+135A
p + e	ገ	U+1350
p + u	ገ	U+1351
p + i	ገ	U+1352
p + a	ገ	U+1353
p + E	ገ	U+1354
p	ገ	U+1355
continued on next page		

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p + o	ፖ	U+1356
p + W + e	ፑ	U+1357
p + W + u	ፒ	U+1358
p + W + i	ፓ	U+1359
p + W	ፔ	U+1360
p + W + a	ፕ	U+1361
p + W + E	ፖ	U+1362
p + W + ' ,	ፑ	U+1363
' + ' ,	ፒ	U+1364
: + :	ፓ	U+1365
: + : + :	ፔ	U+1366
.	ፕ	U+1367
. + .	ፖ	U+1368
. + . + .	ፑ	U+1369
,	ፒ	U+1370
, + ,	ፓ	U+1371
;	ፔ	U+1372
; + ;	ፕ	U+1373
- + :	ፖ	U+1374
: + -	ፑ	U+1375
:	ፒ	U+1376
*	ፓ	U+1377
+ *	ፔ	U+1378
: + + :	ፕ	U+1379
?	ፖ	U+1380
? + ?	ፑ	U+1381
' + ?	ፒ	U+1382
? + ? + ?	ፓ	U+1383
< + <	ፔ	U+1384
> + >	ፕ	U+1385
' + !	ፖ	U+1386
' + 1	ፑ	U+1387
' + 2	ፒ	U+1388
' + 3	ፓ	U+1389
' + 4	ፔ	U+1390
' + 5	ፕ	U+1391
' + 6	ፖ	U+1392
' + 7	ፑ	U+1393
' + 8	ፒ	U+1394
' + 9	ፓ	U+1395
' + 1 + 0	ፔ	U+1396
' + 2 + 0	ፕ	U+1397
' + 3 + 0	ፖ	U+1398
continued on next page		

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' + 4 + 0	ፑ	U+1375
' + 5 + 0	ፒ	U+1376
' + 6 + 0	ፓ	U+1377
' + 7 + 0	ፔ	U+1378
' + 8 + 0	ፕ	U+1379
' + 9 + 0	ፖ	U+137A
' + 1 + 0 + 0	ፑ	U+137B
' + 1 + 0 + 0 + 0	ፒ	U+1372 + U+137B
' + 1 + 0 + 0 + 0 + 0	ፓ	U+137C

Event Ordered Ethiopic IM Table

Sequence	Character	Unicode Address
h	ሀ	U+1205
ሀ + e	ሐ	U+1200
ሀ + u	ሑ	U+1201
ሀ + i	ሒ	U+1202
ሀ + a	ሓ	U+1203
ሀ + E	ሔ	U+1204
ሀ + o	ሕ	U+1206
ሀ + W	ሐ	U+128B
ሀ + [h2]	ሐ	U+1285
ሐ + e	ሐ	U+1280
ሐ + u	ሐ	U+1281
ሐ + i	ሐ	U+1282
ሐ + a	ሐ	U+1283
ሐ + E	ሐ	U+1284
ሐ + o	ሐ	U+1286
ሐ + W	ሐ	U+128B
ሐ + e	ሐ	U+1288
ሐ + u	ሐ	U+128D
ሐ + i	ሐ	U+128A
ሐ + a	ሐ	U+128B
ሐ + E	ሐ	U+128C
[1L]	ሐ	U+120D
ሐ + e	ሐ	U+1208
ሐ + u	ሐ	U+1209
ሐ + i	ሐ	U+120A
ሐ + a	ሐ	U+120B
ሐ + E	ሐ	U+120C
ሐ + o	ሐ	U+120E
ሐ + W	ሐ	U+120F

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ሷ + a	ሷ	U+120F
H	ሷ	U+1215
ሷ + e	ሷ	U+1210
ሷ + u	ሷ	U+1211
ሷ + i	ሷ	U+1212
ሷ + a	ሷ	U+1213
ሷ + E	ሷ	U+1214
ሷ + o	ሷ	U+1216
ሷ + W	ሷ	U+1217
ሷ + a	ሷ	U+1217
[mM]	ሷ	U+121D
ሷ + e	ሷ	U+1218
ሷ + u	ሷ	U+1219
ሷ + i	ሷ	U+121A
ሷ + a	ሷ	U+121B
ሷ + E	ሷ	U+121C
ሷ + o	ሷ	U+121E
ሷ + W	ሷ	U+121F
ሷ + e	ሷ	U+????
ሷ + u	ሷ	U+????
ሷ + i	ሷ	U+????
ሷ + a	ሷ	U+121F
ሷ + E	ሷ	U+????
ሷ + '	ሷ	U+????
ሷ + Y	ሷ	U+1358
ሷ + a	ሷ	U+1358
[rR]	ሷ	U+122D
ሷ + e	ሷ	U+1228
ሷ + u	ሷ	U+1229
ሷ + i	ሷ	U+122A
ሷ + a	ሷ	U+122B
ሷ + E	ሷ	U+122C
ሷ + o	ሷ	U+122E
ሷ + W	ሷ	U+122F
ሷ + a	ሷ	U+122F
ሷ + Y	ሷ	U+1359
ሷ + a	ሷ	U+1359
s	ሷ	U+1235
ሷ + e	ሷ	U+1230
ሷ + u	ሷ	U+1231
ሷ + i	ሷ	U+1232
ሷ + a	ሷ	U+1233
ሷ + E	ሷ	U+1234
ሷ + o	ሷ	U+1236
continued on next page		

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ሷ + W	ሷ	U+1237
ሷ + a	ሷ	U+1237
ሷ + [s2]	ሷ	U+1225
ሷ + e	ሷ	U+1220
ሷ + u	ሷ	U+1221
ሷ + i	ሷ	U+1222
ሷ + a	ሷ	U+1223
ሷ + E	ሷ	U+1224
ሷ + o	ሷ	U+1226
ሷ + W	ሷ	U+1227
ሷ + a	ሷ	U+1227
x	ሷ	U+123D
ሷ + e	ሷ	U+1238
ሷ + u	ሷ	U+1239
ሷ + i	ሷ	U+123A
ሷ + a	ሷ	U+123B
ሷ + E	ሷ	U+123C
ሷ + o	ሷ	U+123E
ሷ + W	ሷ	U+123F
ሷ + a	ሷ	U+123F
q	ሷ	U+1245
ሷ + e	ሷ	U+1240
ሷ + u	ሷ	U+1241
ሷ + i	ሷ	U+1242
ሷ + a	ሷ	U+1243
ሷ + E	ሷ	U+1244
ሷ + o	ሷ	U+1246
ሷ + W	ሷ	U+124B
ሷ + e	ሷ	U+1248
ሷ + u	ሷ	U+124D
ሷ + i	ሷ	U+124A
ሷ + a	ሷ	U+124B
ሷ + E	ሷ	U+124C
ሷ + '	ሷ	U+124D
ሷ + 2	ሷ	U+????
ሷ + e	ሷ	U+????
ሷ + u	ሷ	U+????
ሷ + i	ሷ	U+????
ሷ + a	ሷ	U+????
ሷ + E	ሷ	U+????
ሷ + o	ሷ	U+????
Q	ሷ	U+1255
ሷ + e	ሷ	U+????
ሷ + u	ሷ	U+1251
continued on next page		

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ቅ + i	ቼ	U+1252
ቅ + a	ቾ	U+1253
ቅ + E	ቿ	U+1254
ቅ + o	ቻ	U+1256
ቅ + W	ቼ	U+125B
ቻ + e	ቼ	U+1258
ቻ + u	ቼ	U+125D
ቻ + i	ቼ	U+125A
ቻ + a	ቼ	U+125B
ቻ + E	ቼ	U+125C
ቻ + '	ቼ	U+125D
[bB]	ቼ	U+1265
ቼ + e	ቼ	U+1260
ቼ + u	ቼ	U+1261
ቼ + i	ቼ	U+1262
ቼ + a	ቼ	U+1263
ቼ + E	ቼ	U+1264
ቼ + o	ቼ	U+1266
ቼ + W	ቼ	U+1267
ቼ + e	ቼ	U+1268
ቼ + u	ቼ	U+1269
ቼ + i	ቼ	U+126A
ቼ + a	ቼ	U+126B
ቼ + E	ቼ	U+126C
ቼ + o	ቼ	U+126E
ቼ + W	ቼ	U+126F
ቼ + a	ቼ	U+126F
t	ቼ	U+1275
ቼ + e	ቼ	U+1270
ቼ + u	ቼ	U+1271
ቼ + i	ቼ	U+1272
ቼ + a	ቼ	U+1273
ቼ + E	ቼ	U+1274
ቼ + o	ቼ	U+1276
ቼ + W	ቼ	U+1277
ቼ + a	ቼ	U+1277
c	ቼ	U+127D
continued on next page		

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ቼ + e	ቼ	U+1278
ቼ + u	ቼ	U+1279
ቼ + i	ቼ	U+127A
ቼ + a	ቼ	U+127B
ቼ + E	ቼ	U+127C
ቼ + o	ቼ	U+127E
ቼ + W	ቼ	U+127F
ቼ + a	ቼ	U+127F
n	ቼ	U+1295
ቼ + e	ቼ	U+1290
ቼ + u	ቼ	U+1291
ቼ + i	ቼ	U+1292
ቼ + a	ቼ	U+1293
ቼ + E	ቼ	U+1294
ቼ + o	ቼ	U+1296
ቼ + W	ቼ	U+1297
ቼ + a	ቼ	U+1297
N	ቼ	U+129D
ቼ + e	ቼ	U+1298
ቼ + u	ቼ	U+1299
ቼ + i	ቼ	U+129A
ቼ + a	ቼ	U+129B
ቼ + E	ቼ	U+129C
ቼ + o	ቼ	U+129E
ቼ + W	ቼ	U+129F
ቼ + a	ቼ	U+129F
e	ቼ	U+12A0
[uU]	ቼ	U+12A1
i	ቼ	U+12A2
[aA]	ቼ	U+12A3
E	ቼ	U+12A4
I	ቼ	U+12A5
[oO]	ቼ	U+12A6
አ + a	ቼ	U+12A7
አ + [e2]	ቼ	U+12D0
አ + [uU2]	ቼ	U+12D1
አ + [i2]	ቼ	U+12D2
አ + [aA2]	ቼ	U+12D3
አ + [E2]	ቼ	U+12D4
አ + [I2]	ቼ	U+12D5
አ + [oO2]	ቼ	U+12D6
k	ቼ	U+12AD
ክ + e	ቼ	U+12A8
ክ + u	ቼ	U+12A9
continued on next page		

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ክ + i	ክ	U+12AA
ክ + a	ክ	U+12AB
ክ + E	ክ	U+12AC
ክ + o	ክ	U+12AE
ኳ + e	ኳ	U+12B0
ኳ + u	ኳ	U+12B0
ኳ + i	ኳ	U+12B0
ክ + W	ኳ	U+12B0
ኳ + a	ኳ	U+12B0
ኳ + E	ኳ	U+12B0
ኳ + '	ኳ	U+12B0
ክ + 2	ክ	U+????
ክ + e	ክ	U+????
ክ + u	ክ	U+????
ክ + i	ክ	U+????
ክ + a	ክ	U+????
ክ + E	ክ	U+????
ክ + o	ክ	U+????
K	ክ	U+12B8
ክ + e	ክ	U+12B9
ክ + u	ክ	U+12BA
ክ + i	ክ	U+12BB
ክ + a	ክ	U+12BC
ክ + E	ክ	U+12BD
ክ + o	ክ	U+12BE
ኳ + e	ኳ	U+12C0
ኳ + u	ኳ	U+12C5
ኳ + i	ኳ	U+12C2
ክ + W	ኳ	U+12C3
ኳ + a	ኳ	U+12C3
ኳ + E	ኳ	U+12C4
ኳ + '	ኳ	U+12C5
X	ክ	U+????
ክ + e	ክ	U+????
ክ + u	ክ	U+????
ክ + i	ክ	U+????
ክ + a	ክ	U+????
ክ + E	ክ	U+????
ክ + o	ክ	U+????
[wW]	ው	U+12CD
ው + e	ው	U+12C8
ው + u	ው	U+12C9
ው + i	ዊ	U+12CA
ው + a	ዊ	U+12CB
<i>continued on next page</i>		

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ው + E	ዊ	U+12CC
ው + o	ዊ	U+12CE
z	ዝ	U+12DD
ዝ + e	ዝ	U+12D8
ዝ + u	ዝ	U+12D9
ዝ + i	ዝ	U+12DA
ዝ + a	ዝ	U+12DB
ዝ + E	ዝ	U+12DC
ዝ + o	ዝ	U+12DE
ዝ + W	ዝ	U+12DF
ዝ + a	ዝ	U+12DF
Z	ዝ	U+12E5
ዝ + e	ዝ	U+12E0
ዝ + u	ዝ	U+12E1
ዝ + i	ዝ	U+12E2
ዝ + a	ዝ	U+12E3
ዝ + E	ዝ	U+12E4
ዝ + o	ዝ	U+12E6
ዝ + W	ዝ	U+12E7
ዝ + a	ዝ	U+12E7
[yY]	ይ	U+12ED
ይ + e	ይ	U+12E8
ይ + u	ይ	U+12E9
ይ + i	ይ	U+12EA
ይ + a	ይ	U+12EB
ይ + E	ይ	U+12EC
ይ + o	ይ	U+12EE
ይ + W	ይ	U+12EF
የ + a	የ	U+12EF
d	ድ	U+12F5
ድ + e	ድ	U+12F0
ድ + u	ድ	U+12F1
ድ + i	ድ	U+12F2
ድ + a	ድ	U+12F3
ድ + E	ድ	U+12F4
ድ + o	ድ	U+12F6
ድ + W	ድ	U+12F7
ድ + a	ድ	U+12F7
D	ድ	U+12FD
ድ + e	ድ	U+12F8
ድ + u	ድ	U+12F9
ድ + i	ድ	U+12FA
ድ + a	ድ	U+12FB
ድ + E	ድ	U+12FC
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ሰ + o	ሰ	U+12FE
ሰ + W	ሰ	U+12FF
ሰ + a	ሰ	U+12FF
[jJ]	፳	U+1305
፳ + e	፳	U+1300
፳ + u	፳	U+1301
፳ + i	፳	U+1302
፳ + a	፳	U+1303
፳ + E	፳	U+1304
፳ + o	፳	U+1306
፳ + W	፳	U+1307
፳ + a	፳	U+1307
g	፳	U+130D
፳ + e	፳	U+1308
፳ + u	፳	U+1309
፳ + i	፳	U+130A
፳ + a	፳	U+130B
፳ + E	፳	U+130C
፳ + o	፳	U+130E
፳ + W	፳	U+1315
፳ + e	፳	U+1310
፳ + u	፳	U+1310
፳ + i	፳	U+1312
፳ + a	፳	U+1313
፳ + E	፳	U+1314
፳ + '	፳	U+1315
፳ + 2	፳	U+????
፳ + e	፳	U+????
፳ + u	፳	U+????
፳ + i	፳	U+????
፳ + a	፳	U+????
፳ + E	፳	U+????
፳ + o	፳	U+????
G	፳	U+131D
፳ + e	፳	U+1318
፳ + u	፳	U+1319
፳ + i	፳	U+131A
፳ + a	፳	U+131B
፳ + E	፳	U+131C
፳ + o	፳	U+131E
፳ + W	፳	U+????
፳ + e	፳	U+????
፳ + u	፳	U+????
፳ + i	፳	U+????
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፳ + a	፳	U+????
፳ + E	፳	U+????
፳ + '	፳	U+????
T	፳	U+1325
፳ + e	፳	U+1320
፳ + u	፳	U+1321
፳ + i	፳	U+1322
፳ + a	፳	U+1323
፳ + E	፳	U+1324
፳ + o	፳	U+1326
፳ + W	፳	U+1327
፳ + a	፳	U+1327
፳	፳	U+132D
፳ + e	፳	U+1328
፳ + u	፳	U+1329
፳ + i	፳	U+132A
፳ + a	፳	U+132B
፳ + E	፳	U+132C
፳ + o	፳	U+132E
፳ + W	፳	U+132F
፳ + a	፳	U+122F
P	፳	U+1335
፳ + e	፳	U+1330
፳ + u	፳	U+1331
፳ + i	፳	U+1332
፳ + a	፳	U+1333
፳ + E	፳	U+1334
፳ + o	፳	U+1336
፳ + W	፳	U+1337
፳ + a	፳	U+1337
S	፳	U+133D
፳ + e	፳	U+1338
፳ + u	፳	U+1339
፳ + i	፳	U+133A
፳ + a	፳	U+133B
፳ + E	፳	U+133C
፳ + o	፳	U+133E
፳ + W	፳	U+133F
፳ + a	፳	U+133F
፳ + 2	፳	U+1345
፳ + e	፳	U+1340
፳ + u	፳	U+1341
፳ + i	፳	U+1342
፳ + a	፳	U+1343
continued on next page		

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ø + E	ø	U+1344
ø + o	ø	U+1336
ø + W	ø	U+133F
[fF]	ø	U+134D
ø + e	ø	U+1348
ø + u	ø	U+1349
ø + i	ø	U+134A
ø + a	ø	U+134B
ø + E	ø	U+134C
ø + o	ø	U+134E
ø + W	ø	U+134F
ø + e	ø	U+????
ø + u	ø	U+????
ø + i	ø	U+????
ø + a	ø	U+134F
ø + E	ø	U+????
ø + '	ø	U+????
ø + Y	ø	U+135A
ø + a	ø	U+135A
p	T	U+1355
T + e	T	U+1350
T + u	T	U+1351
T + i	T	U+1352
T + a	T	U+1353
T + E	T	U+1354
T + o	T	U+1356
T + W	T	U+1357
T + e	T	U+????
T + u	T	U+????
T + i	T	U+????
T + a	T	U+1357
T + E	T	U+????
T + '	T	U+????
' + '	'	U+0027
! + !	#	U+1362
# + :	:	U+003A
! + -	!-	U+1366
! + + :	! :	U+1368
.	#	U+1300
# + .	.	U+????
. + .	.	U+002E
,	,	U+1363
̄ + ,	̄	U+002C
continued on next page		

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;	;	U+1364
̄ + ;	;	U+003B
- + :	÷	U+1365
:	:	U+1361
	*	U+1368
+ *	⋈	U+122A
?	?	U+????
? + ?	!	U+1367
! + ?	?	U+1367
< + <	«	U+????
> + >	»	U+????
'	'	U+0060
' + ?	!	U+1367
' + !	!	U+????
' + h	h	U+1285
' + s	s	U+1225
' + q	q	U+????
' + k	k	U+????
' + e	o	U+12D0
' + [uU]	o	U+12D1
' + i	q	U+12D2
' + [aA]	q	U+12D3
' + E	q	U+12D4
' + I	o	U+12D5
' + [oO]	p	U+12D6
'g +	q	U+????
' + S	o	U+1345
' + 1	o	U+1369
' + 2	o	U+136A
' + 3	o	U+136B
' + 4	o	U+136C
' + 5	o	U+136D
' + 6	o	U+136E
' + 7	o	U+136F
' + 8	o	U+1370
' + 9	o	U+1371
ø + 0	i	U+1372
ø + 0	i	U+1373
ø + 0	o	U+1374
ø + 0	o	U+1375
ø + 0	o	U+1376
ø + 0	o	U+1377
ø + 0	o	U+1378
ø + 0	o	U+1379
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$\overline{U} + 0$	\overline{U}	U+137A
$\overline{I} + 0$	\overline{I}	U+137B
$\overline{A} + 0$	\overline{A}	U+136A + U+137B
\vdots	\vdots	\vdots
$\overline{I} + 0$	\overline{U}	U+1371 + U+137B
$\overline{I} + 0$	\overline{I}	U+1372 + U+137B
$\overline{I} + 0$	\overline{I}	U+137C