

Charis SIL - Font Features

Charis SIL is an OpenType-enabled font family that supports the Latin and Cyrillic scripts. It includes a number of optional features that may be useful or required for particular uses or languages. This document lists all the available features.

These OpenType features are primarily specified using four-letter tags (e.g. 'cv17'), although some applications may provide a direct way to control certain common features such as small caps. For more information on how to access OpenType features in specific environments and applications, see [Using Font Features](#).

Please note that Graphite support has been removed in the current release, but continues to be available in the version 5 fonts. See our [Previous Versions archive](#).

This page uses web fonts (WOFF2) to demonstrate font features and should display correctly in all modern browsers. For a more concise example of how to use Charis SIL as a web font see *CharisSIL-webfont-example.html* in the font package *web* folder. For detailed information see [Using SIL Fonts on Web Pages](#).

If this document is not displaying correctly a PDF version is also provided in the documentation/pdf folder of the release package.

Complete feature list

Stylistic alternates

Small caps from lowercase

Affects: all lowercase letters with capital equivalents

Feature	Sample	Feature setting
Standard	a ... Z (all letters with capital equivalents)	smcp=0
Small caps	A ... Z (all letters with capital equivalents)	smcp=1

Small caps from capitals

This feature is not supported in TypeTuner Web.

Affects: all capitals

Feature	Sample	Feature setting
Standard	A ... Z (all capitals)	c2sc=0
Small caps	A ... Z (all capitals)	c2sc=1

Single-story a and g

This feature was formerly called 'Literacy alternates'.

Affects: U+0061 U+00E0 U+00E1 U+00E2 U+00E3 U+00E4 U+00E5 U+0101 U+0103 U+0105 U+01CE U+01DF U+01E1 U+01FB U+0201 U+0203 U+0227 U+1E01 U+1E9A U+1EA1 U+1EA3 U+1EA5 U+1EA7 U+1EA9 U+1EAB U+1EAD U+1EAF U+1EB1 U+1EB3 U+1EB5 U+1EB7 U+2C65 U+2090 U+1D43 U+0363 U+0067 U+011D U+011F U+0121 U+0123 U+01E7 U+01F5 U+01E5 U+1E21 U+A7A1 U+1D4D

Feature	Sample	Feature setting
Standard	a à á â ã ä å ā ă ą ǎ ǎ̄ ǎ̄́ ǎ̄̈ ǎ̄̈́ ǎ̄̈́̈ ǎ̄̈́̈́ ǎ̄̈́̈́̈ ǎ̄̈́̈́̈́ ǎ̄̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈́̈́̈́̈	ss01=0
Single-story	a à á â ã ä å ā ă ą ǎ ǎ̄ ǎ̄́ ǎ̄̈ ǎ̄̈́ ǎ̄̈́̈ ǎ̄̈́̈́ ǎ̄̈́̈́̈ ǎ̄̈́̈́̈́ ǎ̄̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈́̈́̈ ǎ̄̈́̈́̈́̈́̈́̈́̈́ ǎ̄̈́̈́̈́̈́̈́̈́̈́̈	ss01=1

Single-story a (only)

Affects: U+0061 U+00E0 U+00E1 U+00E2 U+00E3 U+00E4 U+00E5 U+0101 U+0103 U+0105 U+01CE U+01DF U+01E1 U+01FB U+0201 U+0203 U+0227 U+1E01 U+1E9A U+1EA1 U+1EA3 U+1EA5 U+1EA7 U+1EA9 U+1EAB U+1EAD U+1EAF U+1EB1 U+1EB3 U+1EB5 U+1EB7 U+2C65 U+2090 U+1D43 U+0363

Feature	Sample	Feature setting
Standard	a à á â ã ä å ā ă ą ǎ ā ǎ á ầ â ã ạ ả ạ ả á ằ ẳ ẫ ậ ắ ằ ẳ ẵ ặ Ạ Ạ Ạ	ss11=0
Single-story	ɑ ̀ ́ ̂ ̃ ̄ ̅ ̆ ̇ ̈ ̉ ̊ ̋ ̌ ̍ ̎ ̏ ̐ ̑ ̒ ̓ ̔ ̕ ̖ ̗ ̘ ̙ ̚ ̛ ̜ ̝ ̞ ̟ ̠ ̡ ̢ ̣ ̤ ̥ ̦ ̧ ̨ ̩ ̪ ̫ ̬ ̭ ̮ ̯ ̰ ̱ ̲ ̳ ̴ ̵ ̶ ̷ ̸ ̹ ̺ ̻ ̼ ̽ ̾ ̿ ̀ ́ ͂ ̓ ̈́ ͅ ͆ ͇ ͈ ͉ ͊ ͋ ͌ ͍ ͎ ͏ ͐ ͑ ͒ ͓ ͔ ͕ ͖ ͗ ͘ ͙ ͚ ͛ ͜ ͝ ͞ ͟ ͠ ͡ ͢ ͣ ͤ ͥ ͦ ͧ ͨ ͩ ͪ ͫ ͬ ͭ ͮ ͯ Ͱ ͱ Ͳ ͳ ʹ ͵ Ͷ ͷ ͸ ͹ ͺ ͻ ͼ ͽ Ϳ ̀ ́ ͂ ̓ ̈́ ͅ ͆ ͇ ͈ ͉ ͊ ͋ ͌ ͍ ͎ ͏ ͐ ͑ ͒ ͓ ͔ ͕ ͖ ͗ ͘ ͙ ͚ ͛ ͜ ͝ ͞ ͟ ͠ ͡ ͢ ͣ ͤ ͥ ͦ ͧ ͨ ͩ ͪ ͫ ͬ ͭ ͮ ͯ Ͱ ͱ Ͳ ͳ ʹ ͵ Ͷ ͷ ͸ ͹ ͺ ͻ ͼ ͽ Ϳ	ss11=1

Single-story g (only)

Affects: U+0067 U+011D U+011F U+0121 U+0123 U+01E7 U+01F5 U+01E5 U+1E21 U+A7A1 U+1D4D

Feature	Sample	Feature setting
Standard	$\mathfrak{g} \hat{\mathfrak{g}} \check{\mathfrak{g}} \dot{\mathfrak{g}} \grave{\mathfrak{g}} \mathring{\mathfrak{g}} \mathfrak{g} \bar{\mathfrak{g}} \mathfrak{g}^{\mathfrak{g}}$	ss12=0
Single-story	$\mathfrak{g} \hat{\mathfrak{g}} \check{\mathfrak{g}} \dot{\mathfrak{g}} \grave{\mathfrak{g}} \mathring{\mathfrak{g}} \mathfrak{g} \bar{\mathfrak{g}} \mathfrak{g}^{\mathfrak{g}}$	ss12=1

Barred-bowl forms

Affects: U+0111 U+0180 U+01E5

Feature	Sample	Feature setting
Standard	đ ʙ ɡ	ss04=0
Barred-bowl	ɖ ɓ ɠ	ss04=1

Slant italic specials

Affects: U+0061 U+00E3 U+00E0 U+00E1 U+00E2 U+00E4 U+00E5 U+0101 U+0103 U+01CE U+01DF U+01E1 U+01FB U+0201 U+0203 U+0227 U+1E01 U+1E9A U+1EA3 U+1EA5 U+1EA7 U+1EA9 U+1EAB U+1EAD U+1EAF U+1EB1 U+1EB3 U+1EB5 U+1EA1 U+1EB7 U+2C65 U+0250 U+00E6 U+0066 U+1E1F U+0069 U+00EC U+00ED U+00EE U+00EF U+0129 U+012B U+012D U+012F U+01D0 U+0209

U+020B U+1E2D U+1E2F U+1EC9 U+1ECB U+0131 U+006C U+013A U+1E37 U+1E39 U+1E3B U+1E3D U+0076 U+1E7D U+1E7F U+007A
U+017A U+017C U+017E U+1E91 U+1E93 U+1E95 U+0493 U+04FB U+F327 U+A749 U+A75F U+2097

Feature	Sample	Feature setting
Standard	<p>a ã à á â ä å ā ă ǎ ǻ ǿ á à ą ả ắ ằ ẳ ẵ ậ ấ ầ ẫ ẩ ạ ặ ø v œ f fi ì í î ï ò ó ô õ ö ŷ Ź ž ƶ ʒ ɛ ɜ Ꝥ ꝥ fi ffi</p>	ss05=0
Slanted	<p>a ã à á â ä å ā ă ǎ ǻ ǿ á à ą ả ắ ằ ẳ ẵ ậ ầ ẩ ẫ ẩ ạ ặ ø v œ f fi ì í î ï ò ó ô õ ö ŷ Ź ž ƶ ʒ ɛ ɜ Ꝥ ꝥ fi ffi</p>	ss05=1

Character alternates

B hook

Affects: U+0181

Feature	Sample	Feature setting
Standard	Б	cv13=0
Lowercase-style	Б	cv13=1

D hook

Affects: U+018A

Feature	Sample	Feature setting
Standard	\mathcal{D}	cv17=0
Lowercase-style	\mathcal{d}	cv17=1

H stroke

Affects: U+0126

Feature	Sample	Feature setting
Standard	H	cv28=0
Vertical stroke	H	cv28=1

J stroke hook

Affects: U+0284

Feature	Sample	Feature setting
Standard	f	cv37=0
Top serif	f	cv37=1

Eng

Affects: U+014A

Feature	Sample	Feature setting
Standard	ŋ	cv43=0
Lowercase style on baseline	ɳ	cv43=1
Uppercase style with descender	ɴ	cv43=2
Alt. lowercase style on baseline	ɲ	cv43=3

N left hook

Affects: U+019D

Feature	Sample	Feature setting
Standard	ɲ	cv44=0
Lowercase-style	ɳ	cv44=1

Open-O

Affects: U+0186 U+0254 U+1D10 U+1D53 U+1D97

Feature	Sample	Feature setting
Standard	ɔ ɔ ɔ ɔ ɔ	cv46=0
Top serif	ɔ ɔ ɔ ɔ ɔ	cv46=1

OU

Affects: U+0222 U+0223 U+1D3D U+1D15

Feature	Sample	Feature setting
Standard	ɔ ɔ ɔ ɔ	cv47=0
Open	ɔ ɔ ɔ ɔ	cv47=1

p hook

Affects: U+01A5

Feature	Sample	Feature setting
Standard	ɸ	cv49=0
Right hook	ɸ	cv49=1

R tail

Affects: U+2C64

Feature	Sample	Feature setting
Standard	Ŕ	cv55=0
Lowercase-style	ŕ	cv55=1

T hook

Affects: U+01AC

Feature	Sample	Feature setting
Standard	Ť	cv57=0
Right hook	Ṭ	cv57=1

V hook

Affects: U+01B2 U+028B U+1DB9

Feature	Sample	Feature setting
Standard	Ŭ ŵ ^ŵ	cv62=0
Straight with low hook	Ṳ ṳ ^Ṵ	cv62=1
Straight with high hook	Ṵ ṵ ^Ṷ	cv62=2

Y hook

Affects: U+01B3

Feature	Sample	Feature setting
Standard	Ŷ	cv68=0
Left hook	Ỳ	cv68=1

Ezh

Affects: U+01B7 U+04E0

Feature	Sample	Feature setting
Standard	Ʒ ʒ	cv20=0
Reversed sigma	Ʒ ʒ	cv20=1

ezh curl

Affects: U+0293

Feature	Sample	Feature setting
Standard	Ʒ	cv19=0
Large bowl	Ʒ	cv19=1

rams horn

Affects: U+0264

Feature	Sample	Feature setting
Standard	ᳵ	cv25=0
Large bowl	ᳶ	cv25=1
Small gamma	᳷	cv25=2

Clicks

Affects: U+01C0 U+01C1 U+01C2 U+01C3 U+2980

Feature	Sample	Feature setting
Standard (descending)	‡ !	cv69=0
Baseline	‡ !	cv69=1

Diacritic and symbol alternates

Vietnamese-style diacritics

Affects: U+1EA4 U+1EA5 U+1EA6 U+1EA7 U+1EA8 U+1EA9 U+1EAA U+1EAB U+1EAE U+1EAF U+1EB0 U+1EB1 U+1EB2 U+1EB3 U+1EB4 U+1EB5 U+1EBE U+1EBF U+1EC0 U+1EC1 U+1EC2 U+1EC3 U+1EC4 U+1EC5 U+1ED0 U+1ED1 U+1ED2 U+1ED3 U+1ED4 U+1ED5 U+1ED6 U+1ED7

Feature	Sample	Feature setting
Standard	Áá Àà Ăă Ãã Ää Åå Ææ Èè Êê Ëë Óó Òò Õõ Öö	cv75=0
Vietnamese-style	Ăă Ææ Ăă Ãã Ää Åå Ææ Èè Êê Ëë Óó Òò Õõ Öö	cv75=1

Kayan diacritics

Affects: U+0300 U+0301

Feature	Sample	Feature setting
Standard	◌̣	cv79=0
Side by side	◌̣̣	cv79=1

Ogonek

Affects: U+0328 U+0104 U+0105 U+0118 U+0119 U+012E U+012F U+0172 U+0173 U+01EA U+01EB U+01EC U+01ED

Feature	Sample	Feature setting
Standard	anything with ◌̣ (Aą Eę Iı Uų Qq Q̣Q̣)	cv76=0
Straight	anything with ◌̣ (Aą Eę Iı Uų Qq Q̣Q̣)	cv76=1

Caron

Affects: U+010F U+013D U+013E U+0165

Feature	Sample	Feature setting
Standard	ď Ľ ľ ť	cv77=0
Global-style	ǎ Ľ ľ ǣ	cv77=1

Modifier apostrophe

Affects: U+02BC U+A78B U+A78C

Feature	Sample	Feature setting
Standard	’ † ‡	cv70=0
Large	’ † ‡	cv70=1

Modifier colon

Affects: U+A789

Feature	Sample	Feature setting
Standard	:	cv71=0
Expanded	:	cv71=1

Empty set

Affects: U+2205

Feature	Sample	Feature setting
Standard	∅	cv98=0
Zero-style	∅	cv98=1

Cyrillic alternates

There are also Cyrillic characters affected by the “Ezh” and “Small capitals” features. Some languages may also use the “Modifier apostrophe”.

Cyrillic E

Affects: U+042D U+044D

Feature	Sample	Feature setting
Standard	Э э	cv80=0
Mongolian-style	ᠡ ᠢ	cv80=1

Cyrillic shha

Affects: U+04BB

Feature	Sample	Feature setting
Standard		cv81=0

Feature	Sample	Feature setting
	h	
Uppercase-style	Ħ	cv81=1

Cyrillic breve

Affects: U+0306

Feature	Sample	Feature setting
Standard	anything with ǃ (ǃǃ)	cv82=0
Cyrillic-style	anything with ǃ (ǃǃ)	cv82=1

Serbian Cyrillic alternates

These alternate forms mainly affect italic styles. Unlike other features this is activated by tagging the span of text as being in the Serbian language, not by turning on an OpenType feature. It is also not available through TypeTuner Web although a similar feature is supported (cv84).

Affects: U+0431 U+0433 U+0434 U+043F U+0442 U+0453

Feature	Sample	Feature setting
Standard	б з ђ н м ѓ	
Serbian	δ ī g ū ū í	lang= 'sr '

Macedonian Cyrillic alternates

These alternate forms mainly affect italic styles. Unlike other features this is activated by tagging the span of text as being in the Macedonian language, not by turning on an OpenType feature. It is also not available through TypeTuner Web although a similar feature is supported (cv84).

Affects: U+0431 U+0433 U+0434 U+043F U+0442 U+0453

Feature	Sample	Feature setting
Standard	б з ђ н м ѓ	
Macedonian	δ ī g ū ū í	lang= 'mk '

Serbian and Macedonian Cyrillic alternates

This feature provides an alternate way to activate the Serbian and Macedonian forms in applications that do not support language-specific features.

Affects: U+0431 U+0433 U+0434 U+043F U+0442 U+0453

Feature	Sample	Feature setting
Standard	б з ђ н м ѓ	cv84=0
Serbian Macedonian forms	δ ī g ū ū í	cv84=1

Tone alternates

Chinantec tones

Affects: U+02CB U+02C8 U+02C9 U+02CA

Feature	Sample	Feature setting
Standard	˘ ˊ ˉ ˋ	cv90=0
Chinantec-style	˘ ˊ ˉ ˋ	cv90=1

Tone numbers

This feature is not supported in TypeTuner Web.

Affects: U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712 U+A713 U+A714 U+A715 U+A716

Feature	Sample	Feature setting
Standard	ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ	cv91=0
Numbers	5 4 3 2 1 5 4 3 2 1	cv91=1

Hide tone contour staves

This feature is not supported in TypeTuner Web.

Affects: U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712 U+A713 U+A714 U+A715 U+A716

Feature	Sample	Feature setting
Standard	ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ ᵀ (↗ ↘)	cv92=0
Hide staves	ˉ ˉ ˉ ˉ ˉ ˉ ˉ ˉ ˉ ˉ (↗ ↘)	cv92=1

Numeral alternates

Subscript numerals

Affects: U+0030 U+0031 U+0032 U+0033 U+0034 U+0035 U+0036 U+0037 U+0038 U+0039

Feature	Sample	Feature setting
Standard	0 1 2 3 4 5 6 7 8 9	subs=0
Subscript	₀ ₁ ₂ ₃ ₄ ₅ ₆ ₇ ₈ ₉	subs=1

Superscript numerals

Affects: U+0030 U+0031 U+0032 U+0033 U+0034 U+0035 U+0036 U+0037 U+0038 U+0039

Feature	Sample	Feature setting
Standard	0 1 2 3 4 5 6 7 8 9	sups=0
Superscript	⁰ ¹ ² ³ ⁴ ⁵ ⁶ ⁷ ⁸ ⁹	sups=1

Automatic fractions

When activated this feature will automatically create fractions when numerals are separated by either the fraction slash (U+2044) or the solidus (U+002F). This feature is not supported in TypeTuner Web.

Affects: U+0030 U+0031 U+0032 U+0033 U+0034 U+0035 U+0036 U+0037 U+0038 U+0039 U+002F U+2044

Feature	Sample	Feature setting
Standard (none)	$\frac{1}{2}$ $\frac{456}{789}$ 1/2 456/789	frac=0
Automatic	$\frac{1}{2}$ $\frac{456}{789}$ $\frac{1}{2}$ $\frac{456}{789}$	frac=1

This guide is from the [Charis SIL project](#) version 6.200 and is copyright © 1997-2023 SIL International.