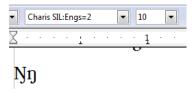
Font Features for Charis SIL

When Charis SIL is used in applications that support Graphite, and that provide an appropriate user interface, various user-controllable font features are available that allow access to alternatively-designed glyphs that might be preferable for use in some contexts. In LibreOffice 3.4.2+ (http://www.libreoffice.org/download/) or OpenOffice 3.2+ (http://www.openoffice.org/download/) the font features can be turned on by choosing the font (ie Charis SIL), followed by a colon, followed by the feature ID, and then followed by the feature setting. So, for example, if the Uppercase eng alternate "Capital N with tail" is desired, the font selection would be "Charis SIL:Engs = 2". (The Feature IDs have changed. If you already have documents which specify the Feature IDs as digits, you will need to change from digits to text. Both are documented in the table below. We are very sorry for the inconvenience.)



If you wish to apply two (or more) features, you can separate them with an "&". Thus, "Charis SIL:Engs = 2&smcp = 1" would apply "Capital N with tail" plus the "Small capitals" feature.



These same features are also available in OpenType. The OpenType feature IDs ("cvxx" for "Character Variant" and "ssxx" for "Stylistic Set") are listed in the OpenType feature ID column. However, they are only available in a few applications. Mozilla Firefox (https://www.mozilla.org/firefox) is the only application that currently supports Character Variants. Adobe InDesign, Microsoft Word, Microsoft Publisher and Mozilla Firefox support Stylistic Sets.

A glyph palette is available for accessing the alternate glyphs in some applications such as Adobe InDesign.

Ideally the selection of these font features is done in application programs, but many applications do not yet support this functionality. In response to this lack of support for features, a program called TypeTuner (command line version: http://scripts.sil.org/TypeTuner and web-based version: http://scripts.sil.org/tw) allows users to create derivative fonts with their own feature settings based on the needs of a local project or region.

In the table below, upper and lower case pairs are shown (if they exist), even if the feature only affects one or the other. This is in order to see how the whole pair looks when a feature is applied. The following font features are available in Charis SIL:

Feature Name	OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes ¹														
Language specific																				
Vietnamese-style diacritics (U+1EA4 U+1EA5 U+1EA6 U+1EA7 U+1EA8 U+1EA9 U+1EA4 U+1EAB U+1EAF U+1EBD U+1EB1 U+1EB2 U+1EB3 U+1EB5 U+1EB5 U+1EB5 U+1EB5 U+1EB5 U+1EB5 U+1EB5 U+1EB5 U+1EC5 U+1EC3 U+1EC4 U+1EC5 U+1ED3 U+1ED4 U+1ED5 U+1ED5 U+1ED7)	cv75	viet (old:1029)	0=False	Áấ Àầ Ẩẩ Ãã Áắ Àằ Åẳ Ãã Éế Èề Éể Eễ ốố Òồ ổổ Õổ	ÁÁ ÀÀ ẢẢ ÃÃ ẮẮ ÀÀ ẢĂ ÃĂ ÉÉ ÈÈ ÉÉ ĚĚ ÓÓ ÒÒ ÔÔ	R, O														
			1=Vietnamese-style	Ấã Ầầ Ẩẩ Ẩã Ấã Ắắ ằằ Ẩã Ếế ềề ểể ễể ốố Òồ ổổ ỗổ	ÂÂ ÂÂ ẨÂ ÃÃ ĂĂ ÄÄ ÅÄ ÃÃ ÉÉÈÈ ÉÉ ÉÉ ÕÓ ÒÒ ÔÔ ÕÕ															
Serbian-style alternates (U+0431 U+0433 U+0434 U+043F U+0442)	locl (accessed trhough	serb	0=False	Бб Гг Дд Пп Тт	ББ ГГ Дд Пп Тт	R														
	Serbian language)		1=True	Бδ Гī Дg Пū Тѿ	ББ ГГ ДД ПП ТТ	7														
Chinantec tones (U+02CB U+02C8 U+02C9 U+02CA)	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	cv90	chtn (old:1057)	0=False	1-/	Small capitals are not available as there is no uppercase equivalent	R
,			1=Chinantec-style	\1 - /	_uppercase equivalent															
Bridging diacritics (U+0308 – used with "L" and "I", U+0311, U+0361 and U+035F – used with "O", "o", "U" and "u".)	-	brig (old:1052)	0=False 1=True	Naso: LL ll Ll Konai: ÔU Naso: LL ll Ll Konai: ÔU	Small capitals do not work properly	G														

¹TypeTuner legend: R=glyphs are Reencoded (will work with dumb rendering); **O**=OpenType rules are activated; **G**=Graphite-only feature (All features are available for Graphite applications.); **T**=Only available through TypeTuner (http://scripts.sil.org/TypeTuner) or TypeTuner Web (http://scripts.sil.org/ttw).

Feature Name	OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Cyrillic ²						
Mongolian-style Cyrillic E (U+042D U+044D)	cv80	mone (old:1027)	0=False	Ээ	Ээ	R
			1=Mongolian-style	Ээ	Ээ	
Combining breve Cyrillic form (U+0306)	cv82	sbrv (old:1028)	0=False	anything with ŏ (ðĕ)	anything with ŏ (ðð)	R (no effect if data is NFC)
			1=Cyrillic-style	anything with ੱ (ðੱð)	anything with ઁ (ðð)	
Cyrillic shha alternate (U+04BB)	cv81	shha (old:1056)	0=False	hh	hh	R
			1=Uppercase style	hь	hh	
Tone-related						
Tone numbers (U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712	cv91	tone (old:1026)	0=Bars	1111111111	Small capitals are not available as there is no uppercase equivalent	G
Ü+A713 U+A714 U+A715 U+A716)			1=Numbers	5 4 3 2 1 5 4 3 2 1	upperedase equivalent	
Hide tone contour staves (U+02E5 U+02E6 U+02E7 U+02E8 U+02E9 U+A712 U+A713 U+A714 U+A715 U+A716)	cv92	tstv (old:1050)	0=False	11441[FFF[(\(\(\(\)\(\)\))	Small capitals are not available as there is no uppercase equivalent	G
U+A/13 U+A/14 U+A/13 U+A/10)			1=True	₋ ₋ (/\ /\)		
9-level pitches (U+F1F1 U+F1F2 U+F1F3 U+F1F4 U+F1F5 U+F1F6 U+F1F7 U+F1F8 U+F1F9)	-	pit9 (old:1062)	0=No tramlines	(_)	Small capitals are not available as there is no uppercase equivalent	G
UTI 11 7 UTI 11 8 UTI 11 7)			1=Tramlines	(\sqrt{)}		
			2=Non-ligated with no tramlines	()		
			3=Non-ligated with tramlines			

There are also Cyrillic characters affected by the "Capital Ezh alternates", "Small capitals" and "Show deprecated PUA" features. Some languages may also use the "Modifier apostrophe alternates."

Feature Name	OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Miscellaneous						
Literacy alternates (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+0067 U+011D U+011F U+0121 U+0123 U+01E7 U+01F5 U+01E5 U+1E21, U+A7A1)	5	litr (old:1032)	0=False (default)	Aa Àà Áá Ââ Ãã Ää Åå Āā Ăă Ąą Ăă Äā Āā Áå Åå Àà Ââ Àa Aa a Aa Aa Áá Ââ Åå Ãã Âậ Áá Ăă Ăă Ăă Ãã Ăặ Æa Gg Ĝĝ Ğğ Ġġ Ģģ Ğğ Gg Gg Gg	AA ÀÀ ÁÁ ÂÂ ÃÃ ÄÄ ÅÅ ĀĀ ĂĂ ĀĀ ĂĂ ĀĀ ĂĂ ĀĀ ĂĂ ĀĀ ÅÅ ÅÅ ÀÀ ÂÂ ÀÀ ÀÀ ÅÄ ÅÄ ÅÄ ÅÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ	R
			1=True	Aa Àà Áá Ââ Ãã Ää Åå Āā Ăă Ąą Ăă Āā Āā Áå Àå Àà Âû Àa Aa à Ḥa Ảa Ấấ Àà Ảå Ãã Ậậ Ấắ Àắ Àằ Ãã Ặ茲 Ặ茲 Ơơ Ĝĝ Ğğ Ġġ Ģģ Ğğ Gġ Gġ Gg	AA ÀÀ ÁÁ ÂÂ ÃÃ ÄÄ ÅÅ ĀĀ ĂĂ ĀĀ ĂĂ ĀĀ ĂĂ ĀĀ ĂĂ ĀĀ ÅÅ ÅÅ ÀÀ ÂÂ ÀÀ ÀÀ ÅÄ ÅÄ ÅÄ ÅÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ ÄÄ	7
Barred-bowl forms (U+0111 U+0180 U+01E5)	ss04	bowl (old:1031)	0=False	Đđ Bb Gg	ĐĐ BB GG	R
			1=Barred-bowl	Đd Bb Gg	ĐĐ Вв GG	

Feature Name	OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes		
Slant italic specials (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+01EB U+0201 U+0203 U+0227 U+1E01 U+1E9A U+1EA3 U+1EA5 U+1EA7 U+1EA9 U+1EAB U+1EAB U+1EB1 U+1EB1 U+1EB3 U+1EB5 U+1EA1 U+1EB7 U+2C65 U+0250 U+00E6 U+006E U+0129 U+0129 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+1E75 U+007A U+017A U+017C U+017E U+1E91 U+1E93 U+1E95 U+0493 U+04FB U+F327 U+A749 U+A75F)	ss05	ital (old:1053)	0=False	Aa Ãã Àà Áá Ââ Ää Åå Āā Ăă Ăă Äā Āā Åå Åå Ââ Àa Àa Aa Åâ Ââ Ââ Ââ Ââ Áå Ãã Ãã Âậ Áắ Àà Åå Ãã Ąa Ăa Æø v Ææ Ff Ff Ii Ìì Íí Îî Ïī Īī Tī Ṭī	ẢẢ ẤẤ ẢÀ ẨẢ ẨẨ ẬẬ ẮẮ ẢĂ ẢẢ	R		
			1=True	Ậậ ắắ ằằ ẳẳ ẵã ṇạ ṇa ṇa r Ææ Ff Ff	AA ÃÃ ÀÀ ÁÁ ÂÂ ÄÄ ÅÅ ÅÅ ĀĀ ĂĂ ĂĂ ÄĀ ĀĀ ÅÅ ÅÅ ÀÀ ÂA ÀA AA Å ÅÅ ÂÂ ÀÀ ÂÂ ÃÃ ÁÃ ÁÁ ÅÀ ÅÅ ÃÃ AA ĂĂ ÅÄ ÅÄ V ÆÆ FF FF II ÌÌ ÍÍ ÎÎ ÏÏ ĨĪ ĪĬ ĬĬ ĮĮ ĬĬ ÌÌ ÎÎ ĮĮ ÏÏ ÎÏ IJ II LL ĹĹ ĻĻ ĻĻ ĻĻ ĻĻ LŁ VV ŨŨ YY VV ZZ ŹŹ ŻŻ ŽŽ ŽŽ ZZ ZZ FF FF FF			
Non-European caron alternates (U+0164 U+0165 U+010E U+010F U+013D U+013E)	cv77	carn (old:1063)		0=European style	Ťť Ďď Ľľ	ŤŤ ĎĎ ĽĽ	R	
			1=Non-European style	Ťť Ďď Ľľ	ŤŤ ĎĎ ĽĽ			
Ogonek alternate (U+0328 U+0104 U+0105 U+0118 U+0119 U+012E U+0328 U+0172 U+073 U+015A U+015F U+015F	cv76	(old:1043)		ogon (old:1043)	0=Curved	anything with ${}_{\bigcirc}$ (Aa Ee Ii Vụ Qo $ar{\mathbb{Q}}$ $ar{\mathbb{Q}}$)	anything with ${}_{\bigcirc}$ (AA FE II VV QO $ar{\mathbb{Q}}$ $ar{\mathbb{Q}}$)	R
U+012F U+0172 U+0173 U+01EA U+01EB U+01EC U+01ED)			1=Straight	anything with ${}_{\!$	anything with ${}_{\!$			
Capital B-hook alternate (U+0181)	cv13	B_hk (old:1064)	0=Uppercase style	В6	Вв	R		
			1=Lowercase style	Б6	ББ	1		

Feature Name	OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes																								
Capital D-hook alternate (U+018A)	cv17	D_hk	0=Uppercase style	Dd	DD	R																								
			1=Lowercase style	ďɗ	ďď																									
Rams horn alternates (U+0264)	cv25	ramh (old:1025)	0=Small bowl	Υ	Small capitals are not available as there is no uppercase equivalent	R																								
			1=Large bowl	σ																										
			2=Small gamma	У																										
Capital H-stroke alternate (U+0126)	cv28	Hstk (old:1038)	0=False	Ħħ	ĦĦ	R																								
			1=Vertical-stroke	Нħ	Нн																									
J-stroke hook alternate (U+0284)	cv37	Jstk (old:1049)	0=No serif	f	Small capitals are not available as there is no uppercase equivalent	R																								
			1=Top serif	ſ	upporodos squirdism																									
Jppercase Eng alternates U+014A)	cv43	Engs (old:1024)	0= Large eng with descender	Ŋŋ	ŋ _ŋ	R																								
																							baseline				1=Large eng on baseline	Ŋŋ	กต	
																								2=Capital N with tail	Ŋŋ	ŊŊ				
			3=Large eng with short stem	ອຶ່ນ	ງອ																									
Capital N-left-hook alternate (U+019D)	cv44	N_hk (old:1035)	0=Uppercase style	Ŋŋ	Nn	R																								
			1=Lowercase style	Որ	ր ր																									
Open-O alternate (U+0186 U+0254 U+1D10 U+1D53 U+1D97)	cv46	opnO (old:1059)	0=Bottom serif	၁၁ ၁ ^၁ ၃	Oo o o o	R																								
			1=Top serif	၁၁ ၁ ^၁ ၃	Oo o o o																									
Small p-hook alternate (U+01A5)	cv49	p_hk (old:1040)	0=Left hook	Рβ	Ръ	R																								
			1=Right hook	Pp	РР																									

OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
cv55	R_tI (old:1039)	0=Uppercase style	Rr	RR	R
		1=Lowercase style	ττ	rr	
cv57	t_hk (old:1037)	0=Left hook	Tf	Тт	R
		1=Right hook	Tf	Тт	
cv62	v_hk: (old:1033)	0=Curved	υυυ	υυυ	R
		1=Straight with low hook	∇v^{v}	Vv^{v}	
		2=Straight with high hook	Vv^{v}	Vv^{v}	
cv68	Y_hk (old:1034)	1=Right hook	Yy	YY	R
		0=Left hook	Yy	YY	
cv19	ezhc (old:1036)		Small capitals are not available as there is no uppercase equivalent	R	
		1=Large bowl	3		
cv20	Ezhr (old:1042)	0=Normal	33 33	33 33	R
		1=Reversed sigma	3 3 3 3	Ζ3 Ζ3	
cv47	opOU (old:1045)	0=Closed	8888	8888	R
		1=Open	8888	8888	
cv70	apos (old:1044)	0=Small	, 11	Small capitals are not available	R
		1=Large	, 11		
cv71	coln (old:1047)	0=Tight	:	Small capitals are not available as there is no uppercase equivalent	R
		0=Expanded	•	11, 0.2222 2 4	
	feature ID	feature ID feature ID cv55 R_III (old:1039) cv57 L_hk (old:1037) cv62 v_hk: (old:1033) cv68 Y_hk (old:1034) cv19 ezhc (old:1036) cv20 Ezhr (old:1042) cv47 opOU (old:1045) cv70 apos (old:1044) cv71 coin	feature ID feature ID cv55 R_II (old:1039) 0=Uppercase style 1=Lowercase style 1=Lowercase style cv57 L_hk (old:1037) 0=Left hook 1=Right hook 1=Right hook cv62 v_hk: (old:1033) 1=Straight with low hook 2=Straight with high hook 0=Left hook cv68 Y_hk (old:1034) 0=Left hook cv19 ezhc (old:1036) 0=Small bowl cv20 Ezhr (old:1042) 0=Normal cv47 opOU (old:1045) 0=Closed cv47 opOU (old:1045) 0=Closed cv70 apos (old:1044) 0=Small cv71 coln (old:1047) 0=Tight (old:1047)	Teature ID Teature ID Teature ID	Petature ID Feature ID Fe

Feature Name	OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
Empty set alternates (U+2205)	cv98	empt (old:1046)	0=Circle	Ø	Small capitals are not available as there is no uppercase equivalent	R
			1=Zero	Ø		
Show invisible characters (U+00AD U+034F U+200B U+200C U+200D U+200E U+200F U+202A U+202B U+202C U+202D U+202E	ss06	invs (old:1030)	0=False		Small capitals are not available as there is no uppercase equivalent	R
U+2060 U+2061 U+2062 U+2063 U+FE00 U+FE01 U+FE02 U+FE03 U+FE04 U+FE05 U+FE06 U+FE07 U+FE08 U+FE09 U+FE0A U+FE0B U+FE0C U+FE0D			1=True	CGJ ZW ZW LRM RLM LRE RLE PDF LRO F() RLO		
U+FE0E U+FE0F U+FEFF)				$ \begin{bmatrix} v_5 \\ 9 \end{bmatrix} \begin{bmatrix} v_6 \\ 8 \end{bmatrix} \begin{bmatrix} v_5 \\ 7 \end{bmatrix} \begin{bmatrix} v_5 \\ 6 \end{bmatrix} \begin{bmatrix} v_6 \\ 5 \end{bmatrix} \begin{bmatrix} v_5 \\ 4 \end{bmatrix} \begin{bmatrix} v_5 \\ 3 \end{bmatrix} \begin{bmatrix} v_5 \\ 2 \end{bmatrix} \begin{bmatrix} v_5 \\ 1 \end{bmatrix} \begin{bmatrix} x \\ x \end{bmatrix} $		
				[VS] [VS] [VS] [VS] [VS] [VS] [ZM] [16] [17] [17] [VS] [ZM]		
Small Caps	smcp, c2sc	smcp (old:1058)		ƒ 9 д	ÇÈÉÊËÌÍÎÏÐÑÒÓÕÖÖÖÖÜÚÚÚÜÜÇFÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄÄ	

Feature Name	OpenType feature ID	Graphite feature ID	Feature Setting	Example	Example with Small Capitals	TypeTuner Notes
				л		
Other Features						
Line spacing	-		Normal Tight Loose	Allows for adjustment of the default line spacing in the font.		Т