Fira Mono

Technical Documentation



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For questions and comments please contact:

Carrois Type Design GbR Simplonstr. 54 10245 Berlin Germany Tel.: +49 (30) 920 389 66

Tel.: +49 (30) 920 389 66 e-Mail: post@carrois.com Internet: <u>www.carrois.com</u>

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Encoded Characters

All encoded characters should be accessible with every unicode capable application. For details about Unicode Blocks visist the <u>Unicode Website</u>.

Basic Latin

Block from 0000 to 007F

000D	0020	0021	0022	0023	0024	0025	0026	0027	0028	0029	002A	002B	002C	002D	002E
		!	11	#	\$	%	Ծ	1	()	*	+	,	-	•
002F	0030	0031	0032	0033	0034	0035	0036	0037	0038	0039	003A	003B	003C	003D	003E
	0	1	2	3	4	5	6	7	8	9	•	•	<	=	>
003F	0040	0041	0042	0043	0044	0045	0046	0047	0048	0049	004A	004B	004C	004D	004E
?	a	Α	В	C	D	Ε	F	G	Н	I	J	K	L	M	N
004F	0050	0051	0052	0053	0054	0055	0056	0057	0058	0059	005A	005B	005C	005D	005E
0	P	Q	R	S	T	U	V	W	X	Y	Z				^
005F	0060	0061	0062	0063	0064	0065	0066	0067	0068	0069	006A	006B	006C	006D	006E
		a	b	C	d	е	f	g	h	i	j	k	l	m	n
006F	0070	0071	0072	0073	0074	0075	0076	0077	0078	0079	007A	007B	007C	007D	007E
0	p	q	r	S	t	u	V	W	Χ	У	Z	{		}	~

Latin-1 Supplement

Block from 0080 to 00FF

00A0	00A1	00A2	00A3	00A4	00A5	00A6	00A7	00A8	00A9	00AA	00AB	00AC	00AD	00AE	00AF
	i	¢	£	¤	¥	¦	§	••	©	<u>a</u>	«	_	-	R	_
00B0	00B1	00B2	00B3	00B4	00B5	00B6	00B7	00B8	00B9	00BA	00BB	00BC	00BD	00BE	00BF
0	<u>±</u>	2	3		μ	\P	•	_	1	0	>>	1/4	1/2	3/4	;
00C0	00C1	00C2	00C3	00C4	00C5	00C6	00C7	00C8	00C9	00CA	00CB	00CC	00CD	00CE	00CF
A	A	Â	Ã	Ä	Å	Æ	Ç	E	É	Ê	Ë	Ì	Í	Î	I
00D0	00D1	00D2	00D3	00D4	00D5	00D6	5 00D7	00D8	00D9	00DA	00DB	00DC	00DD	00DE	00DF
Ð	Ñ	Ò	Ó	Ö	Õ	Ö	×	Ø	Ù	Ú	Û	Ü	Ý	Þ	ß
00E0	00E1	00E2	00E3	00E4	00E5	00E6	00E7	00E8	00E9	00EA	00EB	00EC	00ED	00EE	00EF
à	á	â	ã	ä	å	æ	Ç	è	é	ê	ë	ì	ĺ	î	ï
00F0	00F1	00F2	00F3	00F4	00F5	00F6	00F7	00F8	00F9	00FA	00FB	00FC	00FD	00FE	00FF
ð	ñ	Ò	Ó	ô	õ	ö	<u>•</u>	Ø	ù	ú	û	ü	ý	þ	ÿ

Latin Extended-A

Block from 0100 to 017F

0100	0101	0102	0103	0104	0105	0106	0107	0108	0109	010A	010B	010C	010D	010E	010F
Ā	ā	Ă	ă	Ą	ą	Ć	Ć	Ĉ	Ĉ	Ċ	Ċ	Č	Č	Ď	ď
0110	0111	0112	0113	0114	0115	0116	0117	0118	0119	011A	011B	011C	011D	011E	011F
Ð	đ	Ē	ē	Ĕ	ĕ	Ė	ė	Ę	ę	Ě	ě	Ĝ	ĝ	Ğ	ğ
0120	0121	0122	0123	0124	0125	0126	0127	0128	0129	012A	012B	012C	012D	012E	012F
Ġ	ġ	Ģ	ģ	Ĥ	ĥ	Ħ	ħ	Ĩ	ĩ	Ī	ī	Ĭ	ĭ	Į	į
0130	0131	0132	0133	0134	0135	0136	0137	0138	0139	013A	013B	013C	013D	013E	013F
Ĭ	1	IJ	ij	Ĵ	ĵ	Ķ	ķ	K	Ĺ	l	Ļ	ļ	Ľ	ľ	Ŀ
0140	0141	0142	0143	0144	0145	0146	0147	0148	0149	014A	014B	014C	014D	014E	014F
ŀ	Ł	ł	Ń	ń	Ņ	ņ	Ň	ň	'n	Ŋ	ŋ	0	ō	Ŏ	ŏ
0150	0151	0152	0153	0154	0155	0156	0157	0158	0159	015A	015B	015C	015D	015E	015F
Ö	ő	Œ	œ	Ř	ŕ	Ŗ	ŗ	Ř	ř	Ś	Ś	Ŝ	ŝ	Ş	Ş
0160	0161	0162	0163	0164	0165	0166	0167	0168	0169	016A	016B	016C	016D	016E	016F
Š	Š	Ţ	ţ	Ť	ť	Ŧ	ŧ	Ú	ũ	U	ū	Ŭ	ŭ	Ů	ů
0170	0171	0172	0173	0174	0175	0176	0177	0178	0179	017A	017B	017C	017D	017E	
Ü	ű	Ų	Ų	Ŵ	Ŵ	Y	ŷ	Ÿ	Ź	Ź	Ž	Ż	Ž	ž	

Latin Extended-B

Block from 0180 to 024F



Spacing Modifier Letters

Block from 02B0 to 02FF



Combining Diacritical Marks

Block from 0300 to 036F





Greek and Coptic

Block from 0370 to 03FF

0370	0371	0372	0373	0374	0375	0376	0377	037A	037B	037C	037D	037E	037F	0384	0385
H	\vdash	Т	Т	,	1	И	И	L	Э	\mathbf{c}	Э	;	J	•	
0386	0387	0388	0389	038A	038C	038E	038F	0390	0391	0392	0393	0394	0395	0396	0397
Ά	•	Έ	Ή	Ί	O	Ύ	Ώ	ΰ	Α	В	Γ	Δ	Ε	Z	Η
0398	0399	039A	039B	039C	039D	039E	039F	03A0	03A1	03A3	03A4	03A5	03A6	03A7	03A8
Θ	Ι	K	Λ	M	N	Ξ	0	П	Р	Σ	T	Y	Φ	X	Ψ
03A9	03AA	03AB	03AC	03AD	03AE	03AF	03B0	03B1	03B2	03B3	03B4	03B5	03B6	03B7	03B8
Ω	Ϊ	Ÿ	ά	έ	ή	ί	ΰ	α	β	γ	δ	3	ζ	η	θ
03B9	03BA	03BB	03BC	03BD	03BE	03BF	03C0	03C1	03C2	03C3	03C4	03C5	03C6	03C7	03C8
l	K	λ	μ	٧	ξ	0	π	ρ	ς	σ	τ	U	φ	Χ	Ψ
03C9	03CA	03CB	03CC	03CD	03CE	03CF	03D0	03D1	03D2	03D3	03D4	03D5	03D6	03D7	03D8
ω	ï	Ü	Ó	ύ	ώ	Ķ	в	Э	Y	Ύ	Y	ф	\Box	Ŋ	Q
03D9	03DA	03DB	03DC	03DD	03DE	03DF	03E0	03E1	03F0	03F1	03F2	03F3	03F4	03F5	03F6
Q	ζ	ζ	F	F	4	4	λ	y	N	9	C	j	Θ	ϵ	Э
03F7	03F8	03F9	03FA	03FB	03FC	03FD	03FE	03FF							
Þ	þ	C	M	Μ	ρ	Э	C	Э							

Cyrillic

Block from 0400 to 04FF

p	C	Т	У	ф	X	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
0440	0441	0442	0443	0444	0445	0446	0447	0448	0449	044A	044B	044C	044D	044E	044F
a	б	В	Γ	Д	е	Ж	3	И	Ň	К	Л	M	Н	0	П
0430	0431	0432	0433	0434	0435	0436	0437	0438	0439	043A	043B	043C	043D	043E	043F
P	C	Τ	У	Φ	X	Ц	Ч	Ш	Щ	Ъ	Ы	Ь	Э	Ю	Я
0420	0421	0422	0423	0424	0425	0426	0427	0428	0429	042A	042B	042C	042D	042E	042F
Α	Б	В	Γ	Д	Ε	Ж	3	И	И	K	Л	M	Н	0	П
0410	0411	0412	0413	0414	0415	0416	0417	0418	0419	041A	041B	041C	041D	041E	041F
Ě	Ë	Ђ	Ĺ	ϵ	S	Ι	Î	J	Љ	Њ	ħ	K	Ň	ÿ	Ų
0400	0401	0402	0403	0404	0405	0406	0407	0408	0409	040A	040B	040C	040D	040E	040F

0452 0454 0455 0456 0457 045A 045B 0451 0453 0458 0459 045C 045D 045E 045F ħ ħ j è 1 S 1 K И Ц 9 ϵ Љ Њ 0460 0462 0463 0464 0465 0466 0467 0468 0469 046A 046B 046C 046D 0461 046F Ž ž ω Ю Ѭ Ю Ж Ѣ A Ъ Ю А H Ж Ѭ **(1)** 0470 0472 0473 0474 0475 0477 048B 048C 048D Ψ R θ 0y Ψ V Oy И, Ъ Q θ Ъ 0490 0492 0494 0495 049A 049B 049C 049D 049E 049F 0491 0493 ĸ ħ Ж К Қ 3 F Ŋ Ж Қ К 04A4 04A7 04A0 04A1 04A2 04A3 04A5 04A6 04AA 04AB 04AC 04AD 04AE 04AF К Ң Н ľη Q Ç ļ Τ К Ң Н Пη Q 04B1 04B2 04B3 04B4 04B5 04B6 04B7 04B8 04B9 04BC 04BD 04BE 04BF Ч Y Ц Ч ዎ X Ц Ч ę X h h Ф Ч 04C0 04C2 04C3 04C4 04C5 04C6 04C8 04C9 04CA 04CB 04CC 04CD 04C1 04C7 04CE 04CF I K Ч Ж M Ч Ŋ Д Н, M, Ж Н H Н, 04D4 04D5 04D7 04D8 04D9 04DB 04DC 04DF ä ă ä 3 ä 3 Ā A 9 Ж Æ æ **e** 9 Ж 04E7 04E4 04E5 04ED Ӭ ä 3 И θ И 0 θ y И И θ 0 θ 04F6 04F8 04F9 04FC 04FE 04F5 04FD 04FF f X Ч Ы Γ f X X Ы

Cyrillic Supplement

Block from 0500 to 052F

Jη	Љ	Hh	Њ	П	П	h	h	Н	Н	Ж	ЛК	Я	Я	Л	Л
0520	0521	0522	0523	0524	0525	0526	0527	0528	0529	052A	052B	052C	052D	052E	052F
3	3	Л	Л	ΙX	Л	R	px	Æ	æ	Q	q	W	W	K	ĸ
0510	0511	0512	0513	0514	0515	0516	0517	0518	0519	051A	051B	051C	051D	051E	051F
Ь	d	փ	փ	\mathcal{F}	રુ	3	3,	几	几	Н	Ю	G	G	Մ	τ
0500	0501	0502	0503	0504	0505	0506	0507	0508	0509	050A	050B	050C	050D	050E	050F

Latin Extended Additional

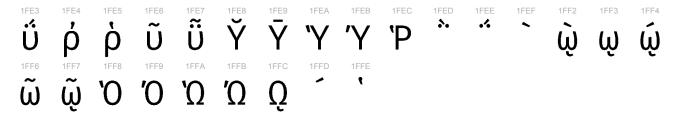
Block from 1E00 to 1EFF



Greek Extended

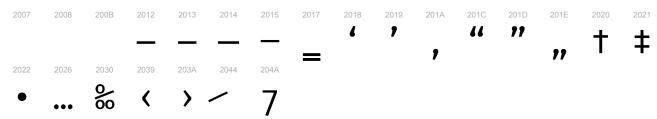
Block from 1F00 to 1FFF

1F00	1F01	1F02	1F03	1F04	1F05	1F06	1F07	1F08	1F09	1F0A	1F0B	1F0C	1F0D	1F0E ~∧	1F0F ~∧
α	α	α	α	α	α	α	α	Ά	Ά	Ά	Έ'Α	Ά	Ά'	Ά	Ά
1F10 É	É	1F12 2	1F13	1F14 "	1F15 Y	1F18	1F19	1F1A	1F1B	1F1C	1F1D	1F20	1F21	1F22	1F23
1F24	1F25	1F26	1F27	1F28	1F29	1F2A	1F2B	1F2C	1F2D	1F2E	1F2F	1F30	1 F31	n	1F33
n n	ή̈́	ή̈́	ή	'H	Ч	ηЦ	"Н	"H	٧Н	γH	⁷ H	ť	1	/\ 	"
1F34	1F35	1F36	1F37	1F38	1F39	■ ■ 1F3A	■ ■ 1F3B	1F3C	■ ■ 1F3D	■ 1F3E	1F3F	1F40	1F41	1F42	1F43
ű	ΐ	ť	ĩ́	Ί	ľ	ľ	ľ"	" I	"I	۲Ţ	Ϊ́	ó	Ó	Ő	ő
1F44	1F45	1F48	1F49	1F4A	1F4B	1F4C	1F4D	1F50	1F51	1F52	1F53	1F54	1F55	1F56	1F57
Ô	Ö	Ö	O'	"O	O"	"O	"O	Ú	Ù	Û	Ü	Ü	Ü	Ú	Ù
1F59	1F5B	1F5D	1F5F	1F60	1F61	1F62	1F63	1F64	1F65	1F66	1F67	1F68	1F69	1F6A	1F6B
Ύ	"Y	Ϋ́Υ	γY	ω	ω	ω	ω	ω	ω	ω	ω	Ώ	Ω'	Ω"	Ω"
1F6C	1F6D	1F6E	1F6F	1F70	1F71	1F72	1F73	1F74	1F75	1F76	1F77	1F78	1F79	1F7A	1F7B
"Ω	77	150	Ω	α	α	3	3	η	η	l	L	0	0	U	U
1F7C	1F7D	1F80	1F81	1F82	1F83	1F84	1F85	1F86	1F87	1F88	1F89	1F8A	1F8B	1F8C	1F8D
(J)	ω	Q	Q	Q	Q	Q	Q	Q	Q	1F98	1F99	1F9A	1F9B	1F9C	TF9D
Ã	Ã	ή	'n	.71	η̈́	ň	ή̈́	ή	~	Ή	Ή	"H	"H	"H	ΥН
1F9E	1F9F	1FA0	1FA1	I 1FA2	1FA3	1FA4	1FA5	1FA6	1FA7	1FA8	1FA9	1FAA	1FAB	1FAC	1FAD
γ̈́Η	Ή	ψ	ώ	ΰ	ΰ	ű	ψ	ψ	ψ	Ω̈́	Ω̈́	Ω̈́	Ω̈́,	Ω̈́	Ω"
1FAE	1FAF	1FB0	1FB1	1FB2	1FB3	1FB4	1FB6 ►	1FB7	1FB8	1FB9	1FBA	1FBB	1FBC	1FBD	1FBE
Ω̈́	Ω̈́	α	α	á	á	á	α	á	A	A	Ά	Ά	Á		L
1FBF	1FC0	1FC1	1FC2	1FC3	1FC4	1FC6	1FC7	1FC8	1FC9	1FCA	1FCB	1FCC	1FCD	1FCE	1FCF
			Ŋ	Ŋ	Ŋ	η	Ŋ	Æ	Έ	Н	Ή	Ą			
1FD0	1FD1	1FD2	1FD3	1FD6	1FD7 ≃	TFD8	1FD9	1FDA	1FDB	1FDD	1FDE	1FDF	1FE0	1FE1	1FE2
L	L	L	L	l	L	上	T	ľ	Ί				U	U	U



General Punctuation

Block from 2000 to 206F



Superscripts and Subscripts

Block from 2070 to 209F



Currency Symbols

Block from 20A0 to 20CF



Letterlike Symbols

Block from 2100 to 214F



Number Forms

Block from 2150 to 218F



Arrows

Block from 2190 to 21FF



Mathematical Operators

Block from 2200 to 22FF



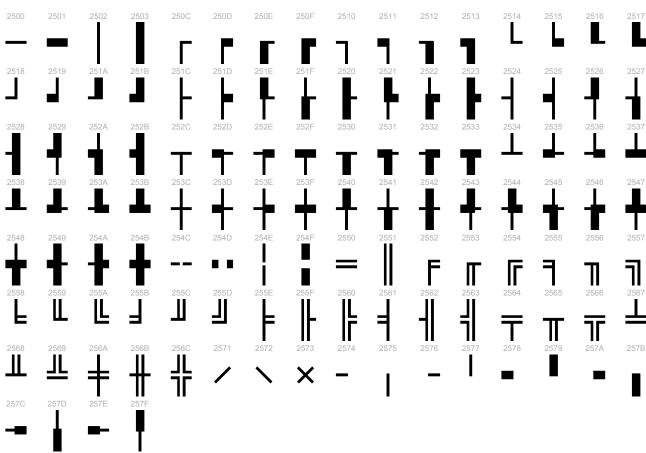
Miscellaneous Technical

Block from 2300 to 23FF



Box Drawing

Block from 2500 to 257F



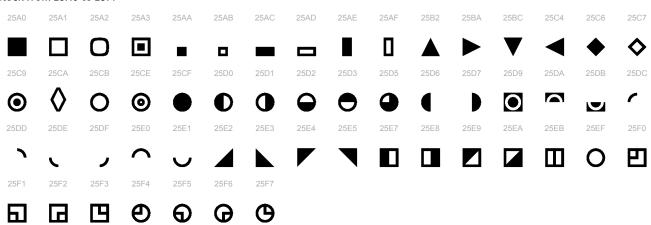
Block Elements

Block from 2580 to 259F



Geometric Shapes

Block from 25A0 to 25FF



Miscellaneous Symbols

Block from 2600 to 26FF



Dingbats

Block from 2700 to 27BF

27A1



Miscellaneous Symbols and Arrows

Block from 2B00 to 2BFF



Private Use Area

Block from E000 to F8FF



Alphabetic Presentation Forms

Block from FB00 to FB4F



Arabic Presentation Forms-B

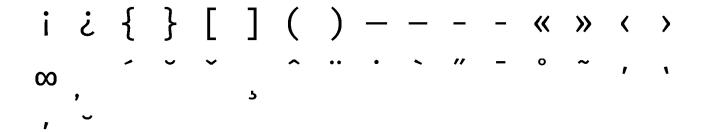
Block from FE70 to FEFF

FEFF

Unencoded Glyphs

All unencoded glyphs are accessible with OpenType layout feature capable applications. For a complete list of supported OpenType layout features see the next section.

Case-Sensitive Forms



Denominators

```
( ) = - +
```

Denominators, Fractions

0 1 2 3 4 5 6 7 8 9

Fractions, Numerators

0 1 2 3 4 5 6 7 8 9

Localized Forms

ĆŃÓŚŹićńóśź′

Numerators

() = - +

Old Style Figures

Tabular Figures

Slashed Zero



Other



OpenType Layout Features

For details about OpenType Layout Features see the OpenType Layout tag registry.

Substitution Features



Access All Alternates

This feature makes all variations of a selected character accessible.



Contextual Alternates

In specified situations, replaces default glyphs with alternate forms which provide better joining behavior.



Discretionary Ligatures

Replaces a sequence of glyphs with a single glyph which is preferred for typographic purposes. This feature covers those ligatures which may be used for special effect, at the user's preference.



Old Style Figures

This feature changes selected figures from the default lining style to oldstyle form.



Tabular Figures

Replaces figure glyphs set on proportional widths with corresponding glyphs set on uniform (tabular) widths.



Slashed Zero

Some fonts contain both a default form of zero, and an alternative form which uses a diagonal slash through the counter. This feature allows the user to change from the default 0 to a slashed form.



Numerators

Replaces selected figures which precede a slash with numerator figures, and replaces the typographic slash with the fraction slash.



Denominators

Replaces selected figures which follow a slash with denominator figures.



Fractions

Replaces figures separated by a slash with 'common' (diagonal) fractions.



Superscript

Replaces lining or oldstyle figures with superior figures (primarily for footnote indication), and may replace lowercase letters with superior letters (primarily for abbreviated French titles).



Subscript

The "subs" feature may replace a default glyph with a subscript glypht.



Ordinals

Replaces default alphabetic glyphs with the corresponding ordinal forms for use after figures.



Case-Sensitive Forms

Shifts various punctuation marks up to a position that works better with all-capital sequences or sets of lining figures; also changes oldstyle figures to lining figures.



Localized Forms

This feature enables localized forms of glyphs to be substituted for default forms.

Positioning Features



Mark Positioning

Positions mark glyphs with respect to base glyphs.



Mark to Mark Positioning

Positions marks with respect to other marks. Required in various non-Latin scripts like Arabic.

Codepages

Mac₀S

MacOS Greek

MS Windows

MS Windows 1250 Central European MS Windows 1251 Cyrillic MS Windows 1252 Western (ANSI)

MS DOS

MS DOS 737 Greek (437G) MS DOS 775 Baltic MS DOS 850 Latin 1 MS DOS 852 Latin 2 MS DOS 855 Cyrilic MS Windows 1253 Greek MS Windows 1254 Turkish MS Windows 1257 Baltic

MS DOS 857 Turkish MS DOS 863 Canadian-French MS DOS 866 Cyrillic MS DOS 869 Greek Modern

IS₀

ISO 8859-1 Latin 1 (Western)
ISO 8859-2 Latin 2 (Central Europe)
ISO 8859-3 Latin 3 (Tu, Malt, Gal, Esp)
ISO 8859-4 Latin 4 (Baltic)
ISO 8859-5 Cyrillic
ISO 8859-7 Greek

ISO 8859- 9 Latin 5 (Turkish) ISO 8859-10 Latin 6 (Scandinavian) ISO 8859-13 Latin 7 (Baltic 2) ISO 8859-15 Latin 9 ISO 8859-16 Latin 10

Languages

Information about languages is mainly based on the Unicode Common Locale Data Repository. For details visit the <u>Unicode CLDR Project</u>.

Latin

Afar Afrikaans Albanian Asu Basque Bemba Bena Bosnian Breton Catalan Chiga Cornish Crimean Tatar Croatian Czech Danish Dutch Embu English Esperanto Estonian Faroese Filipino **Finnish** French Frisian West Friulian

Galician Ganda German Gusii Hungarian Icelandic Indonesian Interlingua **Irish** Italian Jiu Kabuverdianu Kalaallisut Kalenjin Kamba Kikuyu Kinyarwanda Koro Kurdish Latvian Lithuanian Low German Luo Luyia

Maltese Manx Maori Meru Moldavian Morisyen North Ndebele Norwegian Bokmål Norwegian Nynorsk Nyanja Nyankole 0ccitan Oromo Polish Portuguese Romanian Romansh Rombo Rwa Saho Samburu Sami Northern Sango Sena Serbian Shambala Shona Sidamo

Slovenian Soga Somali Sorbian, Lower Sorbian, Upper Sotho, Northern Sotho. Southern South Ndebele Spanish Swahili Swati Swedish Swiss German Taita Taroko Teso Tsonga Tswana Turkish Tyap Vunjo Welsh Wolof Xhosa Zulu

Slovak

Cyrillic

Ga

Azerbaijani Bashkir Belarusian Bulgarian Buriat Chechen Kazakh Kirghiz Macedonian Mari

Machame

Makonde

Malagasy

Malay

Mongolian Russian Serbian Tajik Tatar Uighur Ukrainian Uzbek

Greek

Greek