DejaVu Sans Mono
Basic Latin

	000	001	002	003	004	005	006	007	
0			 0020	0 0030	@ 0040	P 0050	` 0060	p 0070	**0**
1			! 0021	1 0031	A 0041	Q 0051	a 0061	q 0071	**1**
2			" 0022	2 0032	B 0042	R 0052	b 0062	r 0072	**2**
3			# 0023	3 0033	C 0043	S 0053	c 0063	s 0073	**3**
4			$ 0024	4 0034	D 0044	T 0054	d 0064	t 0074	**4**
5			% 0025	5 0035	E 0045	U 0055	e 0065	u 0075	**5**
6			& 0026	6 0036	F 0046	V 0056	f 0066	v 0076	**6**
7			' 0027	7 0037	G 0047	W 0057	g 0067	w 0077	**7**
8			(0028	8 0038	H 0048	X 0058	h 0068	x 0078	**8**
9			) 0029	9 0039	I 0049	Y 0059	i 0069	y 0079	**9**
A			* 002A	: 003A	J 004A	Z 005A	j 006A	z 007A	**A**
B			+ 002B	; 003B	K 004B	[005B	k 006B	{ 007B	**B**
C			, 002C	< 003C	L 004C	\ 005C	l 006C	| 007C	**C**
D			- 002D	= 003D	M 004D	] 005D	m 006D	} 007D	**D**
E			. 002E	> 003E	N 004E	^ 005E	n 006E	~ 007E	**E**
F			/ 002F	? 003F	O 004F	_ 005F	o 006F		**F**

DejaVu Sans Mono
Latin-1 Supplement

	008	009	00A	00B	00C	00D	00E	00F	
0			00A0	° 00B0	À 00C0	Ð 00D0	à 00E0	ð 00F0	0
1			¡ 00A1	± 00B1	Á 00C1	Ñ 00D1	á 00E1	ñ 00F1	1
2			¢ 00A2	² 00B2	Â 00C2	Ò 00D2	â 00E2	ò 00F2	2
3			£ 00A3	³ 00B3	Ã 00C3	Ó 00D3	ã 00E3	ó 00F3	3
4			¤ 00A4	´ 00B4	Ä 00C4	Ô 00D4	ä 00E4	ô 00F4	4
5			¥ 00A5	µ 00B5	Å 00C5	Õ 00D5	å 00E5	õ 00F5	5
6			¦ 00A6	¶ 00B6	Æ 00C6	Ö 00D6	æ 00E6	ö 00F6	6
7			§ 00A7	· 00B7	Ç 00C7	× 00D7	ç 00E7	÷ 00F7	7
8			¨ 00A8	¸ 00B8	È 00C8	Ø 00D8	è 00E8	ø 00F8	8
9			© 00A9	¹ 00B9	É 00C9	Ù 00D9	é 00E9	ù 00F9	9
A			ª 00AA	º 00BA	Ê 00CA	Ú 00DA	ê 00EA	ú 00FA	A
B			« 00AB	» 00BB	Ë 00CB	Û 00DB	ë 00EB	û 00FB	B
C			¬ 00AC	¼ 00BC	Ì 00CC	Ü 00DC	ì 00EC	ü 00FC	C
D			00AD	½ 00BD	Í 00CD	Ý 00DD	í 00ED	ý 00FD	D
E			® 00AE	¾ 00BE	Î 00CE	Þ 00DE	î 00EE	þ 00FE	E
F			¯ 00AF	¿ 00BF	Ï 00CF	ß 00DF	ï 00EF	ÿ 00FF	F

DejaVu Sans Mono
Latin Extended-A

	010	011	012	013	014	015	016	017	
0	Ā 0100	Đ 0110	Ġ 0120	İ 0130	ŀ 0140	ő 0150	Š 0160	Ű 0170	0
1	ā 0101	đ 0111	ġ 0121	ı 0131	Ł 0141	ő 0151	š 0161	ű 0171	1
2	Ă 0102	Ē 0112	Ģ 0122	Ĳ 0132	ł 0142	Œ 0152	Ţ 0162	Ų 0172	2
3	ă 0103	ē 0113	ģ 0123	ĳ 0133	Ń 0143	œ 0153	ţ 0163	ų 0173	3
4	Ą 0104	Ĕ 0114	Ĥ 0124	Ĵ 0134	ń 0144	Ŕ 0154	Ť 0164	Ŵ 0174	4
5	ą 0105	ĕ 0115	ĥ 0125	ĵ 0135	Ņ 0145	ŕ 0155	ť 0165	ŵ 0175	5
6	Ć 0106	Ė 0116	Ħ 0126	Ķ 0136	ņ 0146	Ŗ 0156	Ŧ 0166	Ŷ 0176	6
7	ć 0107	ė 0117	ħ 0127	ķ 0137	Ň 0147	ŗ 0157	ŧ 0167	ŷ 0177	7
8	Ĉ 0108	Ę 0118	Ĩ 0128	ĸ 0138	ň 0148	Ř 0158	Ũ 0168	Ÿ 0178	8
9	ĉ 0109	ę 0119	ĩ 0129	Ĺ 0139	ŉ 0149	ř 0159	ũ 0169	Ź 0179	9
A	Ċ 010A	Ě 011A	Ī 012A	ĺ 013A	Ŋ 014A	Ś 015A	Ū 016A	ź 017A	A
B	ċ 010B	ě 011B	ī 012B	Ļ 013B	ŋ 014B	ś 015B	ū 016B	Ż 017B	B
C	Č 010C	Ĝ 011C	Ĭ 012C	ļ 013C	Ō 014C	Ŝ 015C	Ŭ 016C	ż 017C	C
D	č 010D	ĝ 011D	ĭ 012D	Ľ 013D	ō 014D	ŝ 015D	ŭ 016D	Ž 017D	D
E	Ď 010E	Ğ 011E	Į 012E	ľ 013E	Ŏ 014E	Ş 015E	Ů 016E	ž 017E	E
F	ď 010F	ğ 011F	į 012F	Ŀ 013F	ŏ 014F	ş 015F	ů 016F	ſ 017F	F

DejaVu Sans Mono
Latin Extended-B

	018	019	01A	01B	01C	01D	01E	01F	020	021	022	023	024
0	ƀ 0180	Ɛ 0190	Ơ 01A0	ư 01B0	ǀ 01C0	ǐ 01D0	Ǡ 01E0	ǰ 01F0	Ȁ 0200	Ȑ 0210	Ƞ 0220	Ȱ 0230	ɀ 0240
1	Ɓ 0181	Ƒ 0191	ơ 01A1	Ʊ 01B1	ǁ 01C1	Ǒ 01D1	ǡ 01E1		ȁ 0201	ȑ 0211	ȡ 0221	ȱ 0231	Ɂ 0241
2	Ƃ 0182	ƒ 0192	Ƣ 01A2	Ʋ 01B2	ǂ 01C2	ǒ 01D2	Ǣ 01E2		Ȃ 0202	Ȓ 0212		Ȳ 0232	
3	ƃ 0183	Ɠ 0193	ƣ 01A3	Ƴ 01B3	ǃ 01C3	Ǔ 01D3	ǣ 01E3		ȃ 0203	ȓ 0213		ȳ 0233	
4	Ƅ 0184	Ɣ 0194	Ƥ 01A4	ƴ 01B4		ǔ 01D4		Ǵ 01F4	Ȅ 0204	Ȕ 0214	Ȥ 0224	ȴ 0234	Ʉ 0244
5	ƅ 0185	ƕ 0195	ƥ 01A5	Ƶ 01B5		Ǖ 01D5		ǵ 01F5	ȅ 0205	ȕ 0215	ȥ 0225	ȵ 0235	Ʌ 0245
6	Ɔ 0186	Ɩ 0196	Ʀ 01A6	ƶ 01B6		ǖ 01D6	Ǧ 01E6	Ħ 01F6	Ȇ 0206	Ȗ 0216	Ȧ 0226	ȶ 0236	
7	Ƈ 0187	Ɨ 0197	Ƨ 01A7	Ʒ 01B7		Ǘ 01D7	ǧ 01E7		ȇ 0207	ȗ 0217	ȧ 0227	ȷ 0237	
8	ƈ 0188	Ƙ 0198	ƨ 01A8	Ƹ 01B8		ǘ 01D8	Ǩ 01E8	Ǹ 01F8	Ȉ 0208	Ș 0218	Ȩ 0228	ȸ 0238	
9	Ɖ 0189	ƙ 0199	Ʃ 01A9	ƹ 01B9		Ǚ 01D9	ǩ 01E9	ǹ 01F9	ȉ 0209	ș 0219	ȩ 0229	ȹ 0239	
A	Ɗ 018A	ƚ 019A	ƪ 01AA	ƺ 01BA		ǚ 01DA	Ǫ 01EA		Ȋ 020A	Ț 021A	Ȫ 022A	Ⱥ 023A	
B	Ƌ 018B	ƛ 019B	ƫ 01AB	ƻ 01BB		Ǜ 01DB	ǫ 01EB		ȋ 020B	ț 021B	ȫ 022B	Ȼ 023B	
C	ƌ 018C	Ɯ 019C	Ƭ 01AC	Ƽ 01BC		ǜ 01DC	Ǭ 01EC	Ǽ 01FC	Ȍ 020C	Ȝ 021C	Ȭ 022C	ȼ 023C	Ɽ 024C
D	ƍ 018D	Ɲ 019D	ƭ 01AD	ƽ 01BD	Ǎ 01CD	ǝ 01DD	ǭ 01ED	ǽ 01FD	ȍ 020D	ȝ 021D	ȭ 022D	Ƚ 023D	Ɇ 024D
E	Ǝ 018E	ƞ 019E	Ʈ 01AE	ƾ 01BE	ǎ 01CE	Ǟ 01DE	Ǯ 01EE	Ǿ 01FE	Ȏ 020E	Ȟ 021E	Ȯ 022E	Ɉ 023E	
F	Ə 018F	Ɵ 019F	Ư 01AF	ƿ 01BF	Ǐ 01CF	ǟ 01DF	ǯ 01EF	ǿ 01FF	ȏ 020F	ȟ 021F	ȯ 022F	ȿ 023F	

DejaVu Sans Mono
IPA Extensions

	025	026	027	028	029	02A	
0	ɐ 0250	ɠ 0260	barred-w 0270	ʀ 0280	ʐ 0290	ʠ 02A0	0
1	ɑ 0251	ɡ 0261	ɱ 0271	ʁ 0281	ʑ 0291	ʡ 02A1	1
2	ɒ 0252	ɢ 0262	ɲ 0272	ʂ 0282	ʒ 0292	ʢ 02A2	2
3	ɓ 0253	ɣ 0263	ɳ 0273	ʃ 0283	ʓ 0293	ʣ 02A3	3
4	ɔ 0254	ɤ 0264	ɴ 0274	ʄ 0284	ʔ 0294	ʤ 02A4	4
5	ɕ 0255	ɥ 0265	ɵ 0275	ʅ 0285	ʕ 0295	ʥ 02A5	5
6	ɖ 0256	ɦ 0266	œ 0276	ʆ 0286	ʖ 0296	ʦ 02A6	6
7	ɗ 0257	ɧ 0267	ɷ 0277	ʇ 0287	ʗ 0297	ʧ 02A7	7
8	ɘ 0258	ɨ 0268	ɸ 0278	ʈ 0288	ʘ 0298	ʨ 02A8	8
9	ə 0259	ɩ 0269	ɹ 0279	ʉ 0289	ʙ 0299	ʩ 02A9	9
A	ɚ 025A	ɪ 026A	ɺ 027A	ʊ 028A	ʚ 029A	ʪ 02AA	A
B	ɛ 025B	ɫ 026B	ɻ 027B	ʋ 028B	ʛ 029B	ʫ 02AB	B
C	ɜ 025C	ɬ 026C	ɼ 027C	ʌ 028C	ʜ 029C	ʬ 02AC	C
D	ɝ 025D	ɭ 026D	ɽ 027D	ʍ 028D	ʝ 029D	ʭ 02AD	D
E	ɞ 025E	ɮ 026E	ɾ 027E	ʎ 028E	ʞ 029E	ʮ 02AE	E
F	ɟ 025F	ɯ 026F	ɿ 027F	ʏ 028F	ʟ 029F	ʯ 02AF	F

DejaVu Sans Mono
Spacing Modifier Letters

	02B	02C	02D	02E	02F	
0	ʰ 02B0	ˀ 02C0	ː 02D0	ˠ 02E0		0
1	ʱ 02B1	ˁ 02C1	ˑ 02D1	ˡ 02E1		1
2	ʲ 02B2		˒ 02D2	ˢ 02E2		2
3	ʳ 02B3		˓ 02D3	ˣ 02E3	˳ 02F3	3
4	ʴ 02B4			ˤ 02E4		4
5	ʵ 02B5			˥ 02E5		5
6	ʶ 02B6	ˆ 02C6	˖ 02D6	˦ 02E6		6
7	ʷ 02B7	ˇ 02C7	˗ 02D7	˧ 02E7		7
8	ʸ 02B8	ˈ 02C8	˘ 02D8	˨ 02E8		8
9	ʹ 02B9	ˉ 02C9	˙ 02D9	˩ 02E9		9
A			˚ 02DA			A
B	ʻ 02BB		˛ 02DB			B
C	ʼ 02BC	ˌ 02CC	˜ 02DC			C
D	ʽ 02BD	ˍ 02CD	˝ 02DD			D
E	ʾ 02BE		˞ 02DE	ˮ 02EE		E
F	ʿ 02BF					F

DejaVu Sans Mono
Combining Diacritical Marks

	030	031	032	033	034	035	036	
0	ˋ 0300	̐ 0310	̠ 0320	̰ 0330				**0**
1	́ 0301	̑ 0311	̡ 0321	̱ 0331			͡ 0361	**1**
2	̂ 0302	̒ 0312	̢ 0322	̲ 0332				**2**
3	̃ 0303	̓ 0313	̣ 0323	̳ 0333	ͣ 0343			**3**
4	̄ 0304	̔ 0314	̤ 0324	̴ 0334				**4**
5	̅ 0305	̕ 0315	̥ 0325	̵ 0335				**5**
6	̆ 0306	̖ 0316	̦ 0326	̶ 0336				**6**
7	̇ 0307	̗ 0317	̧ 0327	̷ 0337				**7**
8	̈ 0308	̘ 0318	̨ 0328	̸ 0338		͘ 0358		**8**
9	̉ 0309	̙ 0319	̩ 0329	̹ 0339				**9**
A	̊ 030A	̚ 031A	̪ 032A	̺ 033A				**A**
B	̋ 030B	̛ 031B	̫ 032B	̻ 033B				**B**
C	̌ 030C	̜ 031C	̬ 032C	̼ 033C				**C**
D	̍ 030D	̝ 031D	̭ 032D	̽ 033D				**D**
E	̎ 030E	̞ 031E	̮ 032E	̾ 033E				**E**
F	̏ 030F	̟ 031F	̯ 032F	̿ 033F				**F**

DejaVu Sans Mono
Greek and Coptic

	037	038	039	03A	03B	03C	03D	03E	03F
0			ΐ 0390	Π 03A0	ΰ 03B0	π 03C0	ϐ 03D0	Ϡ 03E0	ϰ 03F0
1			Α 0391	Ρ 03A1	α 03B1	ρ 03C1	ϑ 03D1	ϡ 03E1	ϱ 03F1
2			Β 0392		β 03B2	ς 03C2	ϒ 03D2		ϲ 03F2
3			Γ 0393	Σ 03A3	γ 03B3	σ 03C3	ϓ 03D3		ϳ 03F3
4	ʹ 0374	΄ 0384	Δ 0394	Τ 03A4	δ 03B4	τ 03C4	ϔ 03D4		ϴ 03F4
5	͵ 0375	΅ 0385	Ε 0395	Υ 03A5	ε 03B5	υ 03C5	ϕ 03D5		ϵ 03F5
6		Ά 0386	Ζ 0396	Φ 03A6	ζ 03B6	φ 03C6	ϖ 03D6		϶ 03F6
7		· 0387	Η 0397	Χ 03A7	η 03B7	χ 03C7	ϗ 03D7		Ϸ 03F7
8		Έ 0388	Θ 0398	Ψ 03A8	θ 03B8	ψ 03C8	Ϙ 03D8		ϸ 03F8
9		Ή 0389	Ι 0399	Ω 03A9	ι 03B9	ω 03C9	ϙ 03D9		Ϲ 03F9
A	ͺ 037A	Ί 038A	Κ 039A	Ϊ 03AA	κ 03BA	ϊ 03CA	ϛ 03DA		Ϻ 03FA
B			Λ 039B	Ϋ 03AB	λ 03BB	ϋ 03CB	ϛ 03DB		ϻ 03FB
C		Ό 038C	Μ 039C	ά 03AC	μ 03BC	ό 03CC	Ϝ 03DC		ϼ 03FC
D			Ν 039D	έ 03AD	ν 03BD	ύ 03CD	ϝ 03DD		Ͻ 03FD
E	; 037E	Ύ 038E	Ξ 039E	ή 03AE	ξ 03BE	ώ 03CE	Ϟ 03DE		Ͼ 03FE
F		Ώ 038F	Ο 039F	ί 03AF	ο 03BF		ϟ 03DF		Ͽ 03FF

DejaVu Sans Mono
Cyrillic

	040	041	042	043	044	045	046	047	048	049	04A	04B	04C	04D	04E	04F
0	Ѐ 0400	А 0410	Р 0420	а 0430	р 0440	ѐ 0450				Ґ 0490		Ұ 04B0	Ӏ 04C0	Ӑ 04D0	Ӡ 04E0	Ӱ 04F0
1	Ё 0401	Б 0411	С 0421	б 0431	с 0441	ё 0451				ґ 0491		ұ 04B1	Ӂ 04C1	ӑ 04D1	ӡ 04E1	ӱ 04F1
2	Ђ 0402	В 0412	Т 0422	в 0432	т 0442	ђ 0452	Ѣ 0462	Ѳ 0472		Ғ 0492	Ң 04A2	Ҳ 04B2	ӂ 04C2	Ӓ 04D2	Ӣ 04E2	Ӳ 04F2
3	Ѓ 0403	Г 0413	У 0423	г 0433	у 0443	ѓ 0453	ѣ 0463	ѳ 0473		ғ 0493	ң 04A3	ҳ 04B3	Ӄ 04C3	ӓ 04D3	ӣ 04E3	ӳ 04F3
4	Є 0404	Д 0414	Ф 0424	д 0434	ф 0444	є 0454				Ҕ 0494	Ҥ 04A4		ӄ 04C4	Ӕ 04D4	Ӥ 04E4	Ӵ 04F4
5	Ѕ 0405	Е 0415	Х 0425	е 0435	х 0445	ѕ 0455				ҕ 0495	ҥ 04A5			ӕ 04D5	ӥ 04E5	ӵ 04F5
6	І 0406	Ж 0416	Ц 0426	ж 0436	ц 0446	і 0456				Җ 0496				Ӗ 04D6	Ӧ 04E6	Ӷ 04F6
7	Ї 0407	З 0417	Ч 0427	з 0437	ч 0447	ї 0457				җ 0497			Ӈ 04C7	ӗ 04D7	ӧ 04E7	ӷ 04F7
8	Ј 0408	И 0418	Ш 0428	и 0438	ш 0448	ј 0458				Ҙ 0498			ӈ 04C8	Ә 04D8	Ө 04E8	Ӹ 04F8
9	Љ 0409	Й 0419	Щ 0429	й 0439	щ 0449	љ 0459				ҙ 0499				ә 04D9	ө 04E9	ӹ 04F9
A	Њ 040A	К 041A	Ъ 042A	к 043A	ъ 044A	њ 045A				Қ 049A	Ҫ 04AA	Һ 04BA		Ӛ 04DA	Ӫ 04EA	
B	Ћ 040B	Л 041B	Ы 042B	л 043B	ы 044B	ћ 045B				қ 049B	ҫ 04AB	һ 04BB	Ӌ 04CB	ӛ 04DB	ӫ 04EB	
C	Ќ 040C	М 041C	Ь 042C	м 043C	ь 044C	ќ 045C					Ҭ 04AC		ӌ 04CC	Ӝ 04DC	Ӭ 04EC	
D	Ѝ 040D	Н 041D	Э 042D	н 043D	э 044D	ѝ 045D					ҭ 04AD			ӝ 04DD	ӭ 04ED	
E	Ў 040E	О 041E	Ю 042E	о 043E	ю 044E	ў 045E					Ү 04AE			Ӟ 04DE	Ӯ 04EE	
F	Џ 040F	П 041F	Я 042F	п 043F	я 044F	џ 045F					ү 04AF		ӏ 04CF	ӟ 04DF	ӯ 04EF	

DejaVu Sans Mono
Cyrillic Supplement

	050	051	052
0		Ɛ 0510	
1		Ɛ 0511	
2			
3			
4			
5			
6			
7			
8			
9			
A		Ԛ 051A	
B		ԛ 051B	
C		Ԝ 051C	
D		ԝ 051D	
E			
F			

DejaVu Sans Mono

Arabic

	060	061	062	063	064	065	066	067	068	069	06A	06B	06C	06D	06E	06F	
0			■	ذ 0630	ـ 0640	ِ 0650	٠ 0660		پ 0680							۰ 06F0	0
1			ء 0621	ر 0631	ف 0641	ّ 0651	١ 0661			ڑ 0691						۱ 06F1	1
2			آ 0622	ز 0632	ق 0642	ْ 0652	٢ 0662									۲ 06F2	2
3			أ 0623	س 0633	ك 0643	ٓ 0653	٣ 0663		ڃ 0683							۳ 06F3	3
4	■		ؤ 0624	ش 0634	ل 0644	ٔ 0654	٤ 0664	ٴ 0674	ڄ 0684		ڤ 06A4					۴ 06F4	4
5	■	ؕ 0615	إ 0625	ص 0635	م 0645	ٕ 0655	٥ 0665									۵ 06F5	5
6	؆ 0606		ئ 0626	ض 0636	ن 0646		٦ 0666		چ 0686							۶ 06F6	6
7	؇ 0607		ا 0627	ط 0637	ه 0647		٧ 0667		ڇ 0687							۷ 06F7	7
8			ب 0628	ظ 0638	و 0648		٨ 0668			ژ 0698						۸ 06F8	8
9	؉ 0609		ة 0629	ع 0639	ى 0649		٩ 0669	ٹ 0679			ک 06A9					۹ 06F9	9
A	؊ 060A		ت 062A	غ 063A	ي 064A	ٚ 065A	٪ 066A	ٺ 067A									A
B		؛ 061B	ث 062B		ً 064B		٫ 066B	ٻ 067B									B
C	، 060C		ج 062C		ٌ 064C		٬ 066C					ی 06CC					C
D			ح 062D		ٍ 064D		٭ 066D										D
E			خ 062E		َ 064E			پ 067E			ھ 06BE						E
F		؟ 061F	د 062F		ُ 064F	■		ٿ 067F			گ 06AF						F

DejaVu Sans Mono

Lao

	0E8	0E9	0EA	0EB	0EC	0ED	0EE	0EF	
0				ະ 0EB0					0
1	ກ 0E81		ມ 0EA1	ັ 0EB1					1
2	ຂ 0E82		ຢ 0EA2	າ 0EB2					2
3			ຣ 0EA3	ຳ 0EB3					3
4	ຄ 0E84	ດ 0E94		ິ 0EB4					4
5		ຕ 0E95	ລ 0EA5	ີ 0EB5					5
6		ຖ 0E96		ຶ 0EB6					6
7	ງ 0E87	ທ 0E97	ວ 0EA7	ື 0EB7					7
8	ຈ 0E88			ຸ 0EB8	່ 0EC8				8
9		ນ 0E99		ູ 0EB9	້ 0EC9				9
A	ຊ 0E8A	ບ 0E9A	ສ 0EAA		໊ 0ECA				A
B		ປ 0E9B	ຫ 0EAB	ົ 0EBB	໋ 0ECB				B
C		ຜ 0E9C		ຼ 0EBC	໌ 0ECC				C
D	ຍ 0E8D	ຝ 0E9D	ອ 0EAD		ໍ 0ECD				D
E		ພ 0E9E	ຮ 0EAE						E
F		ຟ 0E9F	ຯ 0EAF						F

DejaVu Sans Mono
Georgian

	10A	10B	10C	10D	10E	10F	
0				ა 10D0	რ 10E0	ჰ 10F0	0
1				ბ 10D1	ს 10E1	ჱ 10F1	1
2				გ 10D2	ტ 10E2	ჲ 10F2	2
3				დ 10D3	უ 10E3	ჳ 10F3	3
4				ე 10D4	ფ 10E4	ჴ 10F4	4
5				ვ 10D5	ქ 10E5	ჵ 10F5	5
6				ზ 10D6	ღ 10E6	ჶ 10F6	6
7				თ 10D7	ყ 10E7	ჷ 10F7	7
8				ი 10D8	შ 10E8	ჸ 10F8	8
9				კ 10D9	ჩ 10E9	ჹ 10F9	9
A				ლ 10DA	ც 10EA	ჺ 10FA	A
B				მ 10DB	ძ 10EB	჻ 10FB	B
C				ნ 10DC	წ 10EC	ჼ 10FC	C
D				ო 10DD	ჭ 10ED		D
E				პ 10DE	ხ 10EE		E
F				ჟ 10DF	ჯ 10EF		F

DejaVu Sans Mono
Phonetic Extensions

	1D0	1D1	1D2	1D3	1D4	1D5	1D6	1D7
0				D 1D30	T 1D40	m 1D50		
1				E 1D31	U 1D41	ŋ 1D51		
2	æ 1D02			Ǝ 1D32	W 1D42	o 1D52	ɨ 1D62	
3				G 1D33	a 1D43	ɔ 1D53	r 1D63	
4		ɶ 1D14		H 1D34	ɐ 1D44	˄ 1D54	u 1D64	
5				I 1D35	ɑ 1D45	˅ 1D55	v 1D65	
6		ᴖ 1D16		J 1D36	æ 1D46	p 1D56		
7		ᴗ 1D17		K 1D37	b 1D47	t 1D57		ɷ 1D77
8	Ɜ 1D08			L 1D38	d 1D48	u 1D58		H 1D78
9	Ʇ 1D09			M 1D39	e 1D49	ᴙ 1D59		
A				N 1D3A	ə 1D4A	ɯ 1D5A		
B				Ͷ 1D3B	ɛ 1D4B	ʌ 1D5B		Ᵽ 1D7B
C			A 1D2C	O 1D3C	з 1D4C			
D		ᴝ 1D1D	Æ 1D2D		g 1D4D			
E		ᴞ 1D1E	B 1D2E	P 1D3E	ṭ 1D4E			
F		ᴟ 1D1F		R 1D3F	k 1D4F			

DejaVu Sans Mono
Phonetic Extensions Supplement

	1D8	1D9	1DA	1DB	
0			f̩ 1DA0	ɴ 1DB0	0
1			ʄ 1DA1	ɵ 1DB1	1
2			g 1DA2	ɸ 1DB2	2
3			ɥ 1DA3	ʂ 1DB3	3
4			ɨ 1DA4	ʃ 1DB4	4
5	ʅ 1D85		ɪ 1DA5	ʈ 1DB5	5
6			ɪ 1DA6	ʉ 1DB6	6
7			ᵻ 1DA7	ʊ 1DB7	7
8			ɟ 1DA8		8
9			ɭ 1DA9	ʋ 1DB9	9
A			ɻ 1DAA	ʌ 1DBA	A
B		ɒ 1D9B	ʟ 1DAB	z 1DBB	B
C		c 1D9C	ᵊ 1DAC	ʐ 1DBC	C
D		ɕ 1D9D	ɰ 1DAD	ʑ 1DBD	D
E		ð 1D9E	ɲ 1DAE	ʒ 1DBE	E
F		ɜ 1D9F	ɳ 1DAF	θ 1DBF	F

DejaVu Sans Mono
Latin Extended Additional

	1E0	1E1	1E2	1E3	1E4	1E5	1E6	1E7	1E8	1E9	1EA	1EB	1EC	1ED	1EE	1EF
0	Ḁ 1E00	Ḑ 1E10	Ḡ 1E20	Ḱ 1E30	Ṁ 1E40		Ṡ 1E60	Ṱ 1E70	Ẁ 1E80	Ẑ 1E90	Ạ 1EA0	Ằ 1EB0			Ỡ 1EE0	Ụ 1EF0
1	ḁ 1E01	ḑ 1E11	ḡ 1E21	ḱ 1E31	ṁ 1E41		ṡ 1E61	ṱ 1E71	ẁ 1E81	ẑ 1E91	ạ 1EA1	ằ 1EB1			ỡ 1EE1	ụ 1EF1
2	Ḃ 1E02	Ḓ 1E12	Ḣ 1E22	Ḳ 1E32	Ṃ 1E42		Ṣ 1E62	Ṳ 1E72	Ẃ 1E82	Ẓ 1E92					Ợ 1EE2	Ỳ 1EF2
3	ḃ 1E03	ḓ 1E13	ḣ 1E23	ḳ 1E33	ṃ 1E43		ṣ 1E63	ṳ 1E73	ẃ 1E83	ẓ 1E93					ợ 1EE3	ỳ 1EF3
4	Ḅ 1E04		Ḥ 1E24	Ḵ 1E34	Ṅ 1E44	Ṕ 1E54		Ṵ 1E74	Ẅ 1E84	Ẕ 1E94					Ụ 1EE4	Ỵ 1EF4
5	ḅ 1E05		ḥ 1E25	ḵ 1E35	ṅ 1E45	ṕ 1E55		ṵ 1E75	ẅ 1E85	ẕ 1E95					ụ 1EE5	ỵ 1EF5
6	Ḇ 1E06		Ḧ 1E26	Ḷ 1E36	Ṇ 1E46	Ṗ 1E56		Ṷ 1E76	Ẇ 1E86	ẖ 1E96		Ă 1EB6	Ệ 1EC6			
7	ḇ 1E07		ḧ 1E27	ḷ 1E37	ṇ 1E47	ṗ 1E57		ṷ 1E77	ẇ 1E87	ẗ 1E97		ặ 1EB7	ệ 1EC7			
8	Ḉ 1E08	Ḙ 1E18	Ḩ 1E28	�! 1E38	Ṉ 1E48	Ṙ 1E58	Ṩ 1E68	Ű 1E78	Ẉ 1E88	ẘ 1E98		Ẹ 1EB8		Ộ 1ED8	Ứ 1EE8	Ỹ 1EF8
9	ḉ 1E09	ḙ 1E19	ḩ 1E29	ḹ 1E39	ṉ 1E49	ṙ 1E59	ṩ 1E69	ű 1E79	ẉ 1E89	ẙ 1E99		ẹ 1EB9		ộ 1ED9	ứ 1EE9	ỹ 1EF9
A	Ḋ 1E0A	Ḛ 1E1A	Ḫ 1E2A	Ḻ 1E3A	Ṋ 1E4A	Ṛ 1E5A	Ṫ 1E6A		Ẋ 1E8A					Ị 1ECA	Ớ 1EDA	Ừ 1EEA	
B	ḋ 1E0B	ḛ 1E1B	ḫ 1E2B	ḻ 1E3B	ṋ 1E4B	ṛ 1E5B	ṫ 1E6B		ẋ 1E8B	ḟ 1E9B				ị 1ECB	ớ 1EDB	ừ 1EEB	
C	Ḍ 1E0C	Ḝ 1E1C	Ḭ 1E2C	Ḽ 1E3C	Ṍ 1E4C	Ṝ 1E5C	Ṭ 1E6C	Ṽ 1E7C	Ẍ 1E8C		Ậ 1EAC	Ẽ 1EBC	Ọ 1ECC	Ờ 1EDC		
D	ḍ 1E0D	ḝ 1E1D	ḭ 1E2D	ḽ 1E3D	ṍ 1E4D	ṝ 1E5D	ṭ 1E6D	ṽ 1E7D	ẍ 1E8D		ậ 1EAD	ẽ 1EBD	ọ 1ECD	ờ 1EDD		
E	Ḏ 1E0E	Ḟ 1E1E		Ḿ 1E3E		Ṟ 1E5E	Ṯ 1E6E	Ṿ 1E7E	Ẏ 1E8E						Ữ 1EEE	
F	ḏ 1E0F	ḟ 1E1F		ḿ 1E3F		ṟ 1E5F	ṯ 1E6F	ṿ 1E7F	ẏ 1E8F	ẟ 1E9F					ữ 1EEF	

DejaVu Sans Mono
Greek Extended

	1F0	1F1	1F2	1F3	1F4	1F5	1F6	1F7	1F8	1F9	1FA	1FB	1FC	1FD	1FE	1FF
0	ἀ 1F00	ἐ 1F10	ἠ 1F20	ἰ 1F30	ὀ 1F40	ὐ 1F50	ὠ 1F60	ὰ 1F70	ᾀ 1F80	ᾐ 1F90	ᾠ 1FA0	ᾰ 1FB0	~ 1FC0	ῐ 1FD0	ῠ 1FE0	■
1	ἁ 1F01	ἑ 1F11	ἡ 1F21	ἱ 1F31	ὁ 1F41	ὑ 1F51	ὡ 1F61	ά 1F71	ᾁ 1F81	ᾑ 1F91	ᾡ 1FA1	ᾱ 1FB1	῁ 1FC1	ῑ 1FD1	ῡ 1FE1	■
2	ἂ 1F02	ἒ 1F12	ἢ 1F22	ἲ 1F32	ὂ 1F42	ὒ 1F52	ὢ 1F62	ὲ 1F72	ᾂ 1F82	ᾒ 1F92	ᾢ 1FA2	ᾲ 1FB2	ῂ 1FC2	ῒ 1FD2	ῢ 1FE2	ῲ 1FF2
3	ἃ 1F03	ἓ 1F13	ἣ 1F23	ἳ 1F33	ὃ 1F43	ὓ 1F53	ὣ 1F63	έ 1F73	ᾃ 1F83	ᾓ 1F93	ᾣ 1FA3	ᾳ 1FB3	ῃ 1FC3	ΐ 1FD3	ΰ 1FE3	ῳ 1FF3
4	ἄ 1F04	ἔ 1F14	ἤ 1F24	ἴ 1F34	ὄ 1F44	ὔ 1F54	ὤ 1F64	ὴ 1F74	ᾄ 1F84	ᾔ 1F94	ᾤ 1FA4	ά 1FB4	ή 1FC4	■	ῤ 1FE4	ώ 1FF4
5	ἅ 1F05	ἕ 1F15	ἥ 1F25	ἵ 1F35	ὅ 1F45	ὕ 1F55	ὥ 1F65	ή 1F75	ᾅ 1F85	ᾕ 1F95	ᾥ 1FA5	■	■	■	ῥ 1FE5	■
6	ἆ 1F06	■	ἦ 1F26	ἶ 1F36	■	ὖ 1F56	ὦ 1F66	ὶ 1F76	ᾆ 1F86	ᾖ 1F96	ᾦ 1FA6	ᾶ 1FB6	ῆ 1FC6	ῖ 1FD6	ῦ 1FE6	ῶ 1FF6
7	ἇ 1F07	■	ἧ 1F27	ἷ 1F37	■	ὗ 1F57	ὧ 1F67	ί 1F77	ᾇ 1F87	ᾗ 1F97	ᾧ 1FA7	ᾷ 1FB7	ῇ 1FC7	ῗ 1FD7	ῧ 1FE7	ῷ 1FF7
8	Ἀ 1F08	Ἐ 1F18	Ἠ 1F28	Ἰ 1F38	Ὀ 1F48	■	Ὠ 1F68	ὸ 1F78	ᾈ 1F88	ᾘ 1F98	ᾨ 1FA8	Ᾰ 1FB8	Ὲ 1FC8	Ῐ 1FD8	Ῠ 1FE8	Ὸ 1FF8
9	Ἁ 1F09	Ἑ 1F19	Ἡ 1F29	Ἱ 1F39	Ὁ 1F49	Ὑ 1F59	Ὡ 1F69	ό 1F79	ᾉ 1F89	ᾙ 1F99	ᾩ 1FA9	Ᾱ 1FB9	Έ 1FC9	Ῑ 1FD9	Ῡ 1FE9	Ό 1FF9
A	Ἂ 1F0A	Ἒ 1F1A	Ἢ 1F2A	Ἲ 1F3A	Ὂ 1F4A	■	Ὢ 1F6A	ὺ 1F7A	ᾊ 1F8A	ᾚ 1F9A	ᾪ 1FAA	Ὰ 1FBA	Ὴ 1FCA	Ὶ 1FDA	Ὺ 1FEA	Ὼ 1FFA
B	Ἃ 1F0B	Ἓ 1F1B	Ἣ 1F2B	Ἳ 1F3B	Ὃ 1F4B	Ὓ 1F5B	Ὣ 1F6B	ύ 1F7B	ᾋ 1F8B	ᾛ 1F9B	ᾫ 1FAB	Ά 1FBB	Ή 1FCB	Ί 1FDB	Ύ 1FEB	Ώ 1FFB
C	Ἄ 1F0C	Ἔ 1F1C	Ἤ 1F2C	Ἴ 1F3C	Ὄ 1F4C	■	Ὤ 1F6C	ὼ 1F7C	ᾌ 1F8C	ᾜ 1F9C	ᾬ 1FAC	ᾼ 1FBC	ῌ 1FCC	■	Ῥ 1FEC	ῼ 1FFC
D	Ἅ 1F0D	Ἕ 1F1D	Ἥ 1F2D	Ἵ 1F3D	Ὅ 1F4D	Ὕ 1F5D	Ὥ 1F6D	ώ 1F7D	ᾍ 1F8D	ᾝ 1F9D	ᾭ 1FAD	᾽ 1FBD	῍ 1FCD	῝ 1FDD	῭ 1FED	´ 1FFD
E	Ἆ 1F0E	■	Ἦ 1F2E	Ἶ 1F3E	■	■	Ὦ 1F6E	■	ᾎ 1F8E	ᾞ 1F9E	ᾮ 1FAE	ι 1FBE	῎ 1FCE	῞ 1FDE	΅ 1FEE	` 1FFE
F	Ἇ 1F0F	■	Ἧ 1F2F	Ἷ 1F3F	■	Ὗ 1F5F	Ὧ 1F6F	■	ᾏ 1F8F	ᾟ 1F9F	ᾯ 1FAF	᾿ 1FBF	῏ 1FCF	῟ 1FDF	` 1FEF	■

DejaVu Sans Mono
General Punctuation

	200	201	202	203	204	205	206	
0	2000	- 2010	† 2020	‰ 2030				0
1	2001	- 2011	‡ 2021	‱ 2031				1
2	2002	— 2012	• 2022	′ 2032				2
3	2003	— 2013	▶ 2023	″ 2033				3
4	2004	— 2014		‴ 2034				4
5	2005	— 2015		‵ 2035	⁅ 2045			5
6	2006		⁖ 2026	‶ 2036	⁆ 2046			6
7	2007	‗ 2017		‷ 2037	⁇ 2047			7
8	2008	' 2018			⁈ 2048			8
9	2009	' 2019		‹ 2039	⁉ 2049			9
A	200A	‚ 201A		› 203A				A
B		‛ 201B						B
C		" 201C		‼ 203C				C
D		" 201D		‽ 203D				D
E		„ 201E		‾ 203E				E
F		‟ 201F	202F			205F		F

DejaVu Sans Mono
Superscripts and Subscripts

	207	208	209	
0	0 2070	0 2080	a 2090	0
1	i 2071	1 2081	e 2091	1
2	■	2 2082	o 2092	2
3	■	3 2083	x 2093	3
4	4 2074	4 2084	ə 2094	4
5	5 2075	5 2085	■	5
6	6 2076	6 2086	■	6
7	7 2077	7 2087	■	7
8	8 2078	8 2088	■	8
9	9 2079	9 2089	■	9
A	+ 207A	+ 208A	■	A
B	− 207B	− 208B	■	B
C	= 207C	= 208C	■	C
D	(207D	(208D	■	D
E	) 207E	) 208E	■	E
F	n 207F	■	■	F

DejaVu Sans Mono
Currency Symbols

	20A	20B	20C	
0	₠ 20A0	₰ 20B0		0
1	₡ 20A1	₱ 20B1		1
2	₢ 20A2	₲ 20B2		2
3	₣ 20A3	₳ 20B3		3
4	₤ 20A4	₴ 20B4		4
5	₥ 20A5	₵ 20B5		5
6	₦ 20A6			6
7	₧ 20A7			7
8	₨ 20A8	₸ 20B8		8
9	₩ 20A9	₹ 20B9		9
A	₪ 20AA			A
B	₫ 20AB			B
C	€ 20AC			C
D	₭ 20AD			D
E	₮ 20AE			E
F	₯ 20AF			F

DejaVu Sans Mono
Letterlike Symbols

	210	211	212	213	214
0					
1					
2	ℂ 2102		™ 2122		
3					
4			ℤ 2124		
5	℅ 2105	ℕ 2115			
6		№ 2116	Ω 2126		
7		℗ 2117			
8					
9		ℙ 2119			
A		ℚ 211A	K 212A		
B			Å 212B		
C					
D	ℍ 210D	ℝ 211D			
E	ℎ 210E		℮ 212E		
F	ℏ 210F				

DejaVu Sans Mono
Number Forms

	215	216	217	218	
0					0
1					1
2					2
3	$\frac{1}{3}$ 2153				3
4	$\frac{2}{3}$ 2154				4
5	$\frac{1}{5}$ 2155				5
6	$\frac{2}{5}$ 2156				6
7	$\frac{3}{5}$ 2157				7
8	$\frac{4}{5}$ 2158				8
9	$\frac{1}{6}$ 2159				9
A	$\frac{5}{6}$ 215A				A
B	$\frac{1}{8}$ 215B				B
C	$\frac{3}{8}$ 215C				C
D	$\frac{5}{8}$ 215D				D
E	$\frac{7}{8}$ 215E				E
F	$\frac{1}{\ }$ 215F				F

DejaVu Sans Mono

Arrows

	219	21A	21B	21C	21D	21E	21F	
0	← 2190	↠ 21A0	↰ 21B0	⇀ 21C0	⇐ 21D0	⇠ 21E0	⇰ 21F0	**0**
1	↑ 2191	↡ 21A1	↱ 21B1	⇁ 21C1	⇑ 21D1	⇡ 21E1	↖ 21F1	**1**
2	→ 2192	↢ 21A2	↲ 21B2	⇂ 21C2	⇒ 21D2	⇢ 21E2	↘ 21F2	**2**
3	↓ 2193	↣ 21A3	↳ 21B3	⇃ 21C3	⇓ 21D3	⇣ 21E3	⇕ 21F3	**3**
4	↔ 2194	↤ 21A4	↴ 21B4	⇄ 21C4	⇔ 21D4	⇤ 21E4	⇴ 21F4	**4**
5	↕ 2195	↥ 21A5	↵ 21B5	⇅ 21C5	⇕ 21D5	⇥ 21E5	⇵ 21F5	**5**
6	↖ 2196	↦ 21A6	↶ 21B6	⇆ 21C6	⇖ 21D6	⇦ 21E6	⇶ 21F6	**6**
7	↗ 2197	↧ 21A7	↷ 21B7	⇇ 21C7	⇗ 21D7	⇧ 21E7	⇷ 21F7	**7**
8	↘ 2198	↨ 21A8	↸ 21B8	⇈ 21C8	⇘ 21D8	⇨ 21E8	⇸ 21F8	**8**
9	↙ 2199	↩ 21A9	↹ 21B9	⇉ 21C9	⇙ 21D9	⇩ 21E9	⇹ 21F9	**9**
A	↚ 219A	↪ 21AA	↺ 21BA	⇊ 21CA	⇚ 21DA	⇪ 21EA	⇺ 21FA	**A**
B	↛ 219B	↫ 21AB	↻ 21BB	⇋ 21CB	⇛ 21DB	⇫ 21EB	⇻ 21FB	**B**
C	↜ 219C	↬ 21AC	↼ 21BC	⇌ 21CC	⇜ 21DC	⇬ 21EC	⇼ 21FC	**C**
D	↝ 219D	↭ 21AD	↽ 21BD	⇍ 21CD	⇝ 21DD	⇭ 21ED	⇽ 21FD	**D**
E	↞ 219E	↮ 21AE	↾ 21BE	⇎ 21CE	⇞ 21DE	⇮ 21EE	⇾ 21FE	**E**
F	↟ 219F	↯ 21AF	↿ 21BF	⇏ 21CF	⇟ 21DF	⇯ 21EF	⇿ 21FF	**F**

DejaVu Sans Mono
Mathematical Operators

	220	221	222	223	224	225	226	227	228	229	22A	22B	22C	22D	22E	22F	
0	∀ 2200		∠ 2220			≐ 2250	≠ 2260	≰ 2270	≮ 2280	⊐ 2290	⊠ 22A0				⋠ 22E0		0
1	⊂ 2201	∑ 2211			⊁ 2241	≑ 2251	≡ 2261	≱ 2271	≻ 2281	⊑ 2291	⊡ 22A1				⋡ 22E1		1
2	∂ 2202	‾ 2212			≈ 2242	≒ 2252	≢ 2262	≲ 2272	⊂ 2282	⊒ 2292	⊢ 22A2				⊄ 22E2		2
3	∃ 2203	∓ 2213			≅ 2243	≓ 2253	≣ 2263	≳ 2273	⊃ 2283		⊣ 22A3				⊅ 22E3		3
4	∄ 2204			∴ 2234	≄ 2244	≔ 2254	≤ 2264	≴ 2274	⊄ 2284		⊤ 22A4				⊆ 22E4		4
5	∅ 2205	∕ 2215		∵ 2235	≅ 2245	≕ 2255	≥ 2265	≵ 2275	⊅ 2285	⊕ 2295	⊥ 22A5		⋅ 22C5		⊇ 22E5		5
6	∆ 2206			∶ 2236	≆ 2246	⊞ 2256	≦ 2266	≶ 2276	⊆ 2286	⊖ 2296			⋆ 22C6		⊊ 22E6		6
7	∇ 2207	∗ 2217	⋀ 2227	∷ 2237	≇ 2247	≗ 2257	≧ 2267	≷ 2277	⊇ 2287	⊗ 2297					≩ 22E7		7
8	∈ 2208	∘ 2218	⋁ 2228	∸ 2238	≈ 2248	≘ 2258	≨ 2268	≸ 2278	⊈ 2288	⊘ 2298					⊈ 22E8		8
9	∉ 2209	∙ 2219	∩ 2229	∹ 2239	≉ 2249	≙ 2259	≩ 2269	≹ 2279	⊉ 2289	⊙ 2299					⊉ 22E9		9
A	∊ 220A	√ 221A	∪ 222A	∺ 223A	≊ 224A	≚ 225A		≺ 227A	⊊ 228A	⊚ 229A				⋚ 22DA		A
B	∋ 220B	∛ 221B	∫ 222B	∻ 223B	≋ 224B	≛ 225B		≻ 227B	⊋ 228B	⊛ 229B				⋛ 22DB		B
C	∌ 220C	∜ 221C	∬ 222C	∼ 223C	≌ 224C	≜ 225C		≼ 227C		⊜ 229C				⋜ 22DC		C
D	∍ 220D	∝ 221D	∭ 222D	∽ 223D	≍ 224D	≝ 225D	≭ 226D	≽ 227D		⊝ 229D			⋍ 22CD	⋝ 22DD		D
E		∞ 221E			≎ 224E	≞ 225E	≮ 226E	≾ 227E		⊞ 229E				⋞ 22DE		E
F	∏ 220F	∟ 221F			≏ 224F	≟ 225F	≯ 226F	≿ 227F	⊏ 228F	⊟ 229F				⋟ 22DF	⋯ 22EF		F

DejaVu Sans Mono
Miscellaneous Technical

	230	231	232	233	234	235	236	237	238	239	23A	23B	23C	23D	23E	23F	
0	⌀ 2300	⌐ 2310	⌠ 2320			⍐ 2350	⍠ 2360	⍰ 2370	⎀ 2380		⎠ 23A0						0
1	⌁ 2301	⌑ 2311	⌡ 2321		⍁ 2341				⎁ 2381		⎡ 23A1						1
2	⌂ 2302	⌒ 2312			⍂ 2342	⍒ 2352			⎂ 2382		⎢ 23A2						2
3	⌃ 2303	⌓ 2313			⍃ 2343	⍓ 2353	⍣ 2363	⍳ 2373	⎃ 2383		⎣ 23A3						3
4	⌄ 2304	⌔ 2314			⍄ 2344	⍔ 2354	⍤ 2364	⍴ 2374			⎤ 23A4						4
5	⌅ 2305	⌕ 2315	⌥ 2325	⍵ 2335			⍥ 2365	⍵ 2375		⎕ 2395	⎥ 23A5						5
6	⌆ 2306		⌦ 2326					⍶ 2376			⎦ 23A6						6
7			⌧ 2327	⌷ 2337	⍇ 2347	⍗ 2357		⍷ 2377			⎧ 23A7						7
8	⌈ 2308	⌘ 2318	⌨ 2328	⌸ 2338	⍈ 2348	⍘ 2358	⍨ 2368	⍸ 2378	⎈ 2388		⎨ 23A8						8
9	⌉ 2309	⌙ 2319		⌹ 2339	⍉ 2349	⍙ 2359	⍩ 2369	⍹ 2379	⎉ 2389		⎩ 23A9						9
A	⌊ 230A			⌺ 233A		⍚ 235A		⍺ 237A	⎊ 238A		⎪ 23AA						A
B	⌋ 230B		⌫ 232B	⌻ 233B	⍋ 234B	⍛ 235B	⍫ 236B		⎋ 238B	⎛ 239B	⎫ 23AB						B
C	⌌ 230C	⌜ 231C		⌼ 233C	⍌ 234C	⍜ 235C	⍬ 236C			⎜ 239C	⎬ 23AC						C
D	⌍ 230D	⌝ 231D		⌽ 233D	⍍ 234D		⍭ 236D	⍽ 237D		⎝ 239D	⎭ 23AD						D
E	⌎ 230E	⌞ 231E		⌾ 233E		⍞ 235E	⍮ 236E			⎞ 239E	⎮ 23AE			⏎ 23CE		E
F	⌏ 230F	⌟ 231F				⍟ 235F	⍯ 236F			⎟ 239F			⏏ 23CF		F

DejaVu Sans Mono
Control Pictures

	240	241	242	243	
0					0
1					1
2					2
3			␣ 2423		3
4					4
5					5
6					6
7					7
8					8
9					9
A					A
B					B
C					C
D					D
E					E
F					F

DejaVu Sans Mono
Box Drawing

	250	251	252	253	254	255	256	257
0	─ 2500	┐ 2510	├ 2520	┰ 2530	┼ 2540	═ 2550	╠ 2560	╰ 2570
1	━ 2501	┑ 2511	┡ 2521	┱ 2531	┽ 2541	║ 2551	╡ 2561	╱ 2571
2	│ 2502	┒ 2512	┢ 2522	┲ 2532	┾ 2542	╒ 2552	╢ 2562	╲ 2572
3	┃ 2503	┓ 2513	┣ 2523	┳ 2533	┿ 2543	╓ 2553	╣ 2563	╳ 2573
4	┄ 2504	└ 2514	┤ 2524	┴ 2534	╀ 2544	╔ 2554	╤ 2564	╴ 2574
5	┅ 2505	┕ 2515	┥ 2525	┵ 2535	╁ 2545	╕ 2555	╥ 2565	╵ 2575
6	┆ 2506	┖ 2516	┦ 2526	┶ 2536	╂ 2546	╖ 2556	╦ 2566	╶ 2576
7	┇ 2507	┗ 2517	┧ 2527	┷ 2537	╃ 2547	╗ 2557	╧ 2567	╷ 2577
8	┈ 2508	┘ 2518	┨ 2528	┸ 2538	╄ 2548	╘ 2558	╨ 2568	╸ 2578
9	┉ 2509	┙ 2519	┩ 2529	┹ 2539	╅ 2549	╙ 2559	╩ 2569	╹ 2579
A	┊ 250A	┚ 251A	┪ 252A	┺ 253A	╆ 254A	╚ 255A	╪ 256A	╺ 257A
B	┋ 250B	┛ 251B	┫ 252B	┻ 253B	╇ 254B	╛ 255B	╫ 256B	╻ 257B
C	┌ 250C	┝ 251C	┬ 252C	┼ 253C	╌ 254C	╜ 255C	╬ 256C	╼ 257C
D	┍ 250D	┞ 251D	┭ 252D	┽ 253D	╍ 254D	╝ 255D	╭ 256D	╽ 257D
E	┎ 250E	┟ 251E	┮ 252E	┾ 253E	╎ 254E	╞ 255E	╮ 256E	╾ 257E
F	┏ 250F	┠ 251F	┯ 252F	┿ 253F	╏ 254F	╟ 255F	╯ 256F	╿ 257F

DejaVu Sans Mono
Block Elements

	258	259	
0	■ 2580	▐ 2590	0
1	▁ 2581	░ 2591	1
2	▂ 2582	▒ 2592	2
3	▃ 2583	▓ 2593	3
4	▄ 2584	▔ 2594	4
5	▅ 2585	▕ 2595	5
6	▆ 2586	▖ 2596	6
7	▇ 2587	▗ 2597	7
8	█ 2588	▘ 2598	8
9	▉ 2589	▙ 2599	9
A	▊ 258A	▚ 259A	A
B	▋ 258B	▛ 259B	B
C	▌ 258C	▜ 259C	C
D	▍ 258D	▝ 259D	D
E	▎ 258E	▞ 259E	E
F	▏ 258F	▟ 259F	F

DejaVu Sans Mono
Geometric Shapes

	25A	25B	25C	25D	25E	25F	
0	■ 25A0	▰ 25B0	◀ 25C0	◐ 25D0	⌒ 25E0	◰ 25F0	0
1	□ 25A1	▱ 25B1	◁ 25C1	◑ 25D1	⌣ 25E1	◱ 25F1	1
2	◻ 25A2	▲ 25B2	◂ 25C2	◒ 25D2	◢ 25E2	◲ 25F2	2
3	▣ 25A3	△ 25B3	◃ 25C3	◓ 25D3	◣ 25E3	◳ 25F3	3
4	▤ 25A4	▴ 25B4	◄ 25C4	◔ 25D4	◤ 25E4	◴ 25F4	4
5	▥ 25A5	▵ 25B5	◅ 25C5	◕ 25D5	◥ 25E5	◵ 25F5	5
6	▦ 25A6	▶ 25B6	◆ 25C6	◖ 25D6	◦ 25E6	◶ 25F6	6
7	▧ 25A7	▷ 25B7	◇ 25C7	◗ 25D7	◧ 25E7	◷ 25F7	7
8	▨ 25A8	▸ 25B8	◈ 25C8	◘ 25D8	◨ 25E8	◸ 25F8	8
9	▩ 25A9	▹ 25B9	◉ 25C9	◙ 25D9	◩ 25E9	◹ 25F9	9
A	▪ 25AA	► 25BA	◊ 25CA	◚ 25DA	◪ 25EA	◺ 25FA	A
B	▫ 25AB	▻ 25BB	○ 25CB	◛ 25DB	◫ 25EB	◻ 25FB	B
C	▬ 25AC	▼ 25BC	◌ 25CC	◜ 25DC	◬ 25EC	◼ 25FC	C
D	▭ 25AD	▽ 25BD	◍ 25CD	◝ 25DD	◭ 25ED	◽ 25FD	D
E	▮ 25AE	▾ 25BE	◎ 25CE	◞ 25DE	◮ 25EE	◾ 25FE	E
F	▯ 25AF	▿ 25BF	● 25CF	◟ 25DF	◯ 25EF	◿ 25FF	F

DejaVu Sans Mono
Miscellaneous Symbols

	260	261	262	263	264	265	266	267	268	269	26A	26B	26C	26D	26E	26F	
0	☀ 2600	☐ 2610	☠ 2620		♀ 2640	↗ 2650	♠ 2660	⚰ 2670	⚀ 2680	⚐ 2690	⚠ 26A0	⚰ 26B0					**0**
1	☁ 2601	☑ 2611	☡ 2621		♁ 2641	♑ 2651	♡ 2661	⚱ 2671	⚁ 2681	⚑ 2691	⚡ 26A1	⚱ 26B1					**1**
2	☂ 2602	☒ 2612	☢ 2622		♂ 2642	♒ 2652	♢ 2662	♲ 2672	⚂ 2682	⚒ 2692							**2**
3	☃ 2603	☓ 2613	☣ 2623		♃ 2643	♓ 2653	♣ 2663	♳ 2673	⚃ 2683	⚓ 2693							**3**
4	☄ 2604	☔ 2614	☤ 2624		♄ 2644	♔ 2654	♤ 2664	♴ 2674	⚄ 2684	⚔ 2694							**4**
5	★ 2605	☕ 2615	☥ 2625		♅ 2645	♕ 2655	♥ 2665	♵ 2675	⚅ 2685	⚕ 2695							**5**
6	☆ 2606	☖ 2616	☦ 2626		♆ 2646	♖ 2656	♦ 2666	♶ 2676	⚆ 2686	⚖ 2696							**6**
7	☇ 2607	☗ 2617	☧ 2627		♇ 2647	♗ 2657	♧ 2667	♷ 2677	⚇ 2687	⚗ 2697							**7**
8	☈ 2608	☘ 2618	☨ 2628	☸ 2638	♈ 2648	♘ 2658	♨ 2668	♸ 2678	⚈ 2688	⚘ 2698							**8**
9	☉ 2609	☙ 2619	☩ 2629	☹ 2639	♉ 2649	♙ 2659	♩ 2669	♹ 2679	⚉ 2689	⚙ 2699							**9**
A	☊ 260A	☚ 261A	☪ 262A	☺ 263A	♊ 264A	♚ 265A	♪ 266A	♺ 267A	⚊ 268A	⚚ 269A							**A**
B	☋ 260B	☛ 261B	☫ 262B	☻ 263B	♋ 264B	♛ 265B	♫ 266B	♻ 267B	⚋ 268B	⚛ 269B							**B**
C	☌ 260C	☜ 261C	☬ 262C	☼ 263C	♌ 264C	♜ 265C	♬ 266C	♼ 267C		⚜ 269C							**C**
D	☍ 260D	☝ 261D	☭ 262D	☽ 263D	♍ 264D	♝ 265D	♭ 266D	♽ 267D									**D**
E	☎ 260E	☞ 261E	☮ 262E	☾ 263E	♎ 264E	♞ 265E	♮ 266E	♾ 267E									**E**
F	☏ 260F	☟ 261F	☯ 262F	☿ 263F	♏ 264F	♟ 265F	♯ 266F	♿ 267F									**F**

DejaVu Sans Mono
Dingbats

	270	271	272	273	274	275	276	277	278	279	27A	27B	
0		✐ 2710	✠ 2720	✰ 2730	❀ 2740	❐ 2750		❰ 2770			➠ 27A0		0
1	✁ 2701	✑ 2711	✡ 2721	✱ 2731	❁ 2741	❑ 2751	❡ 2761	❱ 2771			➡ 27A1	➱ 27B1	1
2	✂ 2702	✒ 2712	✢ 2722	✲ 2732	❂ 2742	❒ 2752	❢ 2762	❲ 2772			➢ 27A2	➲ 27B2	2
3	✃ 2703	✓ 2713	✣ 2723	✳ 2733	❃ 2743		❣ 2763	❳ 2773			➣ 27A3	➳ 27B3	3
4	✄ 2704	✔ 2714	✤ 2724	✴ 2734	❄ 2744		❤ 2764	❴ 2774		➔ 2794	➤ 27A4	➴ 27B4	4
5		✕ 2715	✥ 2725	✵ 2735	❅ 2745		❥ 2765	❵ 2775			➥ 27A5	➵ 27B5	5
6	✆ 2706	✖ 2716	✦ 2726	✶ 2736	❆ 2746	❖ 2756	❦ 2766				➦ 27A6	➶ 27B6	6
7	✇ 2707	✗ 2717	✧ 2727	✷ 2737	❇ 2747		❧ 2767				➧ 27A7	➷ 27B7	7
8	✈ 2708	✘ 2718		✸ 2738	❈ 2748	❘ 2758	❨ 2768			➘ 2798	➨ 27A8	➸ 27B8	8
9	✉ 2709	✙ 2719	✩ 2729	✹ 2739	❉ 2749	❙ 2759	❩ 2769			➙ 2799	➩ 27A9	➹ 27B9	9
A		✚ 271A	✪ 272A	✺ 273A	❊ 274A	❚ 275A	❪ 276A			➚ 279A	➪ 27AA	➺ 27BA	A
B		✛ 271B	✫ 272B	✻ 273B	❋ 274B	❛ 275B	❫ 276B			➛ 279B	➫ 27AB	➻ 27BB	B
C	✌ 270C	✜ 271C	✬ 272C	✼ 273C		❜ 275C	❬ 276C			➜ 279C	➬ 27AC	➼ 27BC	C
D	✍ 270D	✝ 271D	✭ 272D	✽ 273D	❍ 274D	❝ 275D	❭ 276D			➝ 279D	➭ 27AD	➽ 27BD	D
E	✎ 270E	✞ 271E	✮ 272E	✾ 273E		❞ 275E	❮ 276E			➞ 279E	➮ 27AE	➾ 27BE	E
F	✏ 270F	✟ 271F	✯ 272F	✿ 273F	❏ 274F		❯ 276F			➟ 279F	➯ 27AF		F

DejaVu Sans Mono
Miscellaneous Mathematical Symbols-A

	27C	27D	27E	
0			◊ 27E0	0
1				1
2				2
3				3
4				4
5	⟅ 27C5			5
6	⟆ 27C6			6
7				7
8			⟨ 27E8	8
9			⟩ 27E9	9
A				A
B				B
C				C
D				D
E				E
F				F

Miscellaneous Mathematical Symbols-B

	298	299	29A	29B	29C	29D	29E	29F
0								
1								
2								
3								
4								
5								
6								
7								
8								
9								
A								⧺ 29FA
B							◆ 29EB	⧻ 29FB
C								
D								
E								
F								

DejaVu Sans Mono
Supplemental Mathematical Operators

	2A0	2A1	2A2	2A3	2A4	2A5	2A6	2A7	2A8	2A9	2AA	2AB	2AC	2AD	2AE	2AF
0																
1																
2																
3																
4																
5																
6																
7																
8																
9																
A																
B																
C																
D																
E																
F			✕ 2A2F													

DejaVu Sans Mono
Miscellaneous Symbols and Arrows

	2B0	2B1	2B2	2B3	2B4	2B5	2B6	2B7	2B8	2B9	2BA	2BB	2BC	2BD	2BE	2BF	
0																	0
1																	1
2		⬒ 2B12															2
3		⬓ 2B13															3
4		◤ 2B14															4
5		◣ 2B15															5
6		◈ 2B16															6
7		◈ 2B17															7
8		⬙ 2B18															8
9		⬨ 2B19															9
A		⬚ 2B1A															A
B																	B
C																	C
D																	D
E																	E
F																	F

DejaVu Sans Mono
Latin Extended-C

	2C6	2C7	
0		ꜱ 2C70	0
1			1
2			2
3			3
4	ꝺ 2C64		4
5		ꜵ 2C75	5
6		Ꜷ 2C76	6
7		ꜷ 2C77	7
8			8
9		ꜹ 2C79	9
A		Ꜻ 2C7A	A
B			B
C		ꜻ 2C7C	C
D	ꜽ 2C6D	Ꜿ 2C7D	D
E	ꜿ 2C6E	Ꝁ 2C7E	E
F	ꝁ 2C6F	Ꝃ 2C7F	F

DejaVu Sans Mono
Supplemental Punctuation

	2E0	2E1	2E2	2E3	2E4	2E5	2E6	2E7
0								
1								
2			⸢ 2E22					
3			⸣ 2E23					
4			⸤ 2E24					
5			⸥ 2E25					
6								
7								
8		⸘ 2E18						
9								
A								
B								
C								
D								
E			⸮ 2E2E					
F								

DejaVu Sans Mono
Modifier Tone Letters

	A70	A71	
0		˙A710	0
1		A711	1
2		A712	2
3		A713	3
4		A714	4
5		A715	5
6		A716	6
7			7
8	A708		8
9	A709		9
A	A70A		A
B	A70B	↑ A71B	B
C	A70C	↓ A71C	C
D	A70D	! A71D	D
E	A70E	¡ A71E	E
F	A70F	¡ A71F	F

DejaVu Sans Mono
Latin Extended-D

	A72	A73	A74	A75	A76	A77	A78	A79	A7A	A7B	A7C	A7D	A7E	A7F	
0															0
1															1
2	Ʒ A722														2
3	Ʒ A723														3
4	Ꜥ A724														4
5	ꜥ A725														5
6	Ħ A726														6
7	ħ A727														7
8															8
9							꞉ A789								9
A							꞊ A78A								A
B							ꞋA78B								B
C							ꞌ A78C								C
D							Ɥ A78D								D
E															E
F															F

DejaVu Sans Mono

Private Use Area

	F60	F61	F62	F63	F64	F65	F66	F67	F68	F69	F6A	F6B	F6C	F6D	F6E	F6F	
0																	0
1																	1
2																	2
3																	3
4																	4
5													δ				5
6													F6C5				6
7																	7
8																	8
9																	9
A																	A
B																	B
C																	C
D																	D
E																	E
F																	F

DejaVu Sans Mono
Alphabetic Presentation Forms

	FB0	FB1	FB2	FB3	FB4
0					
1	ﬁ FB01				
2	ﬂ FB02				
3					
4					
5					
6					
7					
8					
9					
A					
B					
C					
D					
E					
F					

DejaVu Sans Mono
Arabic Presentation Forms-A

	FB5	FB6	FB7	FB8	FB9	FBA	FBB	FBC	FBD	FBE	FBF	FC0	FC1	FC2	FC3	FC4
0		نَ FB60	ۊ FB70	ڃ FB80	ک FB90											
1		� FB61	ﻱ FB71	סּ FB81	ک FB91											
2	ب FB52	ﺕ FB62	ﺝ FB72		گ FB92											
3	ﺏ FB53	ﺗ FB63	ﺟ FB73		گ FB93											
4	ﺑ FB54	ﺓ FB64	ﺣ FB74		گ FB94											
5	ﺒ FB55	ﺕ FB65	ﺝ FB75		گ FB95											
6	ﺖ FB56	ﭦ FB66	ﺡ FB76													
7	ﺗ FB57	ﭧ FB67	ﺣ FB77													
8	ﺙ FB58	ﭨ FB68	ﺧ FB78						ﺮ FBE8							
9	ﺚ FB59	ﭩ FB69	ﺨ FB79						ﺲ FBE9							
A	ﺛ FB5A	ﻕ FB6A	ﺝ FB7A	ﮊ FB8A	ﮪ FBAA											
B	ﺟ FB5B	ﻗ FB6B	ﺝ FB7B	ﮋ FB8B	ﮫ FBAB											
C	ﺑ FB5C	ۏ FB6C	ﭼ FB7C	ﮌ FB8C	ﮬ FBAC					ﯼ FBFC						
D	ﺑ FB5D	ﯔ FB6D	ﭽ FB7D	ﮍ FB8D	ﮭ FBAD					ﯽ FBFD						
E	ﺛ FB5E	ﻕ FB6E	ﺝ FB7E	ک FB8E	ﮞ FB9E					ﯾ FBFE						
F	ﺛ FB5F	ﻗ FB6F	ﺝ FB7F	ک FB8F	ﮟ FB9F					ﯿ FBFF						

DejaVu Sans Mono
Arabic Presentation Forms-B

	FE7	FE8	FE9	FEA	FEB	FEC	FED	FEE	FEF	
0	ﹰ FE70	ء FE80	ب FE90	ج FEA0	ﺰ FEB0	ﺰ FEC0	ﻐ FED0	ﻠ FEE0	ﻰ FEF0	**0**
1	ﹱ FE71	آ FE81	ﺑ FE91	ح FEA1	س FEB1	ط FEC1	ﻑ FED1	م FEE1	ي FEF1	**1**
2	ﹲ FE72	�آ FE82	ﺒ FE92	ﺢ FEA2	ﺲ FEB2	ﻂ FEC2	ﻒ FED2	ﻢ FEE2	ﻲ FEF2	**2**
3	ﹳ FE73	أ FE83	ة FE93	ﺣ FEA3	ﺳ FEB3	ﻃ FEC3	ﻓ FED3	ﻣ FEE3	ﻳ FEF3	**3**
4	ﹴ FE74	ﺄ FE84	ﺔ FE94	ﺤ FEA4	ﺴ FEB4	ﻄ FEC4	ﻔ FED4	ﻤ FEE4	ﻴ FEF4	**4**
5	■ FE75	ﺅ FE85	ت FE95	خ FEA5	ش FEB5	ظ FEC5	ق FED5	ن FEE5	ﻵ FEF5	**5**
6	ﹶ FE76	ﺆ FE86	ﺖ FE96	ﺦ FEA6	ﺶ FEB6	ﻆ FEC6	ﻖ FED6	ﻦ FEE6	ﻶ FEF6	**6**
7	ﹷ FE77	إ FE87	ﺗ FE97	ﺧ FEA7	ﺷ FEB7	ﻇ FEC7	ﻗ FED7	ﻧ FEE7	ﻷ FEF7	**7**
8	ﹸ FE78	ﺈ FE88	ﺘ FE98	ﺨ FEA8	ﺸ FEB8	ﻈ FEC8	ﻘ FED8	ﻨ FEE8	ﻸ FEF8	**8**
9	ﹹ FE79	ئ FE89	ث FE99	د FEA9	ص FEB9	ع FEC9	ك FED9	ه FEE9	ﻹ FEF9	**9**
A	ﹺ FE7A	ﺊ FE8A	ﺚ FE9A	ﺪ FEAA	ﺺ FEBA	ﻊ FECA	ﻚ FEDA	ﻪ FEEA	ﻺ FEFA	**A**
B	ﹻ FE7B	ﺋ FE8B	ﺛ FE9B	ذ FEAB	ﺻ FEBB	ﻋ FECB	ک FEDB	ه FEEB	لا FEFB	**B**
C	ﹼ FE7C	ﺌ FE8C	ﺜ FE9C	ﺬ FEAC	ﺼ FEBC	ﻌ FECC	ﻜ FEDC	ﻬ FEEC	ﻼ FEFC	**C**
D	ﹽ FE7D	ا FE8D	ج FE9D	ر FEAD	ض FEBD	غ FECD	ل FEDD	و FEED	■ FEFD	**D**
E	ﹾ FE7E	ﺎ FE8E	ﺝ FE9E	ﺮ FEAE	ﺽ FEBE	ﻎ FECE	ﻞ FEDE	ﻮ FEEE	■ FEFE	**E**
F	ﹿ FE7F	ب FE8F	ﺟ FE9F	ز FEAF	ﺿ FEBF	ﻏ FECF	ﻟ FEDF	ﻯ FEEF	FEFF	**F**

DejaVu Sans Mono

Specials

FFF		
0		0
1		1
2		2
3		3
4		4
5		5
6		6
7		7
8		8
9	FFF9	9
A	FFFA	A
B	FFFB	B
C	FFFC	C
D	FFFD	D
E		E
F		F

DejaVu Sans Mono
Mathematical Alphanumeric Symbols

	1D60	1D61	1D62	1D63	1D64	1D65	1D66	1D67	1D68	1D69	1D6A	1D6B	1D6C	1D6D	1D6E	1D6F
0								A 1D670	Q 1D680	g 1D690	w 1D6A0					
1								B 1D671	R 1D681	h 1D691	x 1D6A1					
2								C 1D672	S 1D682	i 1D692	y 1D6A2					
3								D 1D673	T 1D683	j 1D693	z 1D6A3					
4								E 1D674	U 1D684	k 1D694						
5								F 1D675	V 1D685	l 1D695						
6								G 1D676	W 1D686	m 1D696						
7								H 1D677	X 1D687	n 1D697						
8								I 1D678	Y 1D688	o 1D698						
9								J 1D679	Z 1D689	p 1D699						
A								K 1D67A	a 1D68A	q 1D69A						
B								L 1D67B	b 1D68B	r 1D69B						
C								M 1D67C	c 1D68C	s 1D69C						
D								N 1D67D	d 1D68D	t 1D69D						
E								O 1D67E	e 1D68E	u 1D69E						
F								P 1D67F	f 1D68F	v 1D69F						

DejaVu Sans Mono
Mathematical Alphanumeric Symbols

	1D70	1D71	1D72	1D73	1D74	1D75	1D76	1D77	1D78	1D79	1D7A	1D7B	1D7C	1D7D	1D7E	1D7F	
0																	0
1																	1
2																	2
3																	3
4																	4
5																	5
6																0 1D7F6	6
7																1 1D7F7	7
8																2 1D7F8	8
9																3 1D7F9	9
A																4 1D7FA	A
B																5 1D7FB	B
C																6 1D7FC	C
D																7 1D7FD	D
E																8 1D7FE	E
F																9 1D7FF	F

Replace this file with `prentcsmacro.sty` for your meeting,
or with `entcsmacro.sty` for your meeting. Both can be
found at the ENTCS Macro Home Page.

An Example Paper

My Name [1,2]

My Department
My University
My City, My Country

My Co-author [3]

My Co-author's Department
My Co-author's University
My Co-author's City, My Co-author's Country

Abstract

This is a short example to show the basics of using the ENTCS style macro files.
Ample examples of how files should look may be found among the published volumes
of the series at the ENTCS Home Page `http://www.elsevier.nl/locate/entcs`.

Key words: Please list keywords from your paper here, separated
by commas.

1 Introduction

This short note provides a guide to using the ENTCS macro package for
preparing papers for publication in your conference *Proceedings*. The *Proceedings* may be printed and hard copies distributed to participants at the
meeting; this is an option to Conference Organizers may choose to exercise.
The *Proceedings* also will be par of a volume in the series *Electronic Notes
in Theoretical Computer Science* (ENTCS), which is published under the auspices of Elsevier Science B. V., the publishers of *Theoretical Computer Science*.
It's home page is `http://www.elsevier.nl/locate/entcs`

The ENTCS macro package consists of two files:

`entcs.cls,` the basic style file, and

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[1] Thanks to everyone who should be thanked
[2] Email: `myuserid@mydept.myinst.myedu`
[3] Email: `couserid@codept.coinst.coedu`

entcsmacro.sty, a macro file containing the definitions of some of the theorem-
like environments and a few other tidbits.

The formatting these style files impose should *not* be altered – the reason for
using them is to attain a uniform format for all papers in the *Proceedings* of
which your paper is a part.

Additional macro files can be added using `\usepackage{...}`. The file
`entcsmacro.sty` *must* be included in the list, as is done at the start of the
source file for this paper.

The ENTCS package requires a relatively up-to-date LaTeX system in order
to be successfully used. This is reflected in two other packages that are called
by entcs.cls, which must be available on your machine. These are:

- The `hyperref` package. This package allows the use of hyperlinks in files
  prepared using LaTeX2e, one of the main features of Adobe's Acrobat©
  Reader software. Be sure that you have at least version 6.69d of this pack-
  age.

- The `ifpdf` package. This is used by hyperref to differentiate between the
  use of pdfLaTeX and LaTeX2e, followed by dvips and then ps2pdf.

The file `instraut.dvi` contains information about the use of LaTeXto pre-
pare files for online publication by Elsevier. This file refers to the older version
of LaTeX that is no longer suppported, and that is inadequate for preparing
`.pdf` files for online publication. Reading this file should answer most of the
basic questions about LaTeX that might arise.

2 Frontmatter

The biggest difference between a "usual" LaTeX style such as `article.sty`
and the ENTCS package is that the ENTCS macro package requires the title,
author's name or names, abstract, keywords and "thanks" all to be included
within the `frontmatter` environment. At the beginning of the source file for
this paper, you'll notice this. Also, you'll notice that the usual `\maketitle`
is absent; it no longer is needed. The ENTCS style package automatically
generates the title, author's name and address, and related material at the
beginning of the paper. Note also that hyperref has been disabled in this part
of the entcs.cls file, so references to footnotes aren't linked to the appropriate
footenotes or addresses. This is an old problem with LaTeX, involving the fact
that the references within the frontmatter aren't passed cleanly to the linking
software.

For those who have used the ENTCS package before, the one new thing
to note is the inclusion of *Keywords*; these are now required by Elsevier –
they're also required by ACM's *Computing Reviews* which reviews ENTCS
publications.

The ENTCS macro package provides two alternatives to listing authors
names and addresses. These are described in detail in the file `instraut.dvi`.

Basically, listing each author and his or her address in turn, is the simplest method. But, if there are several authors and two or more share the same address (but not all authors are at this address), then the method of listing authors first, and then the addresses, and of referencing addresses to authors should be used.

Also, notice that acknowledgment of support (the contents of `\thanks`) should be done by a separate listing of `\thanks[NSF]{To the NSF}` with the optional argument – `[NSF]` – being used for `\thanksref` which is attached to those authors acknowledging such support. It is important that the `\thanks` not be included within the scope of `\author{}` or of `\title{}`, but it must be within the scope of the environment `frontmatter`.

More details about added terms such as `\collab` can be found in `inst.dvi`, if they are needed.

Also, notice that the command `\lastname{My Lastname}` has been included *before* the `frontmatter` begins. This command should contain the last names of the authors of the paper. If there are no more than three authors, then they should be listed with the word "and" between the last two; if more than three authors collaborated on the paper, then the first author only should be listed, together with `\emph{et al}`. This command creates the headline for each page after page 1.

Finally, please be sure to include an abstract for your paper.

3 Sectioning and Environments

Since ENTCS is published through the auspices of Elsevier Science B. V., their style files have been used to create the ENTCS macro package. Here's a proof that this package is not much different than most of the ones one encounters:

Definition 3.1 A file is *derived* from another if it is obtained with only a few modifications from the original file.

Theorem 3.2 *The file* `entcs.cls` *is derived from* `elsart.sty`.

Proof. This is clear from the similarity of the output to the output from Elsevier's style files. □

If one wants to start a proof with a descriptive word, such as "sketch", then one can use the `\begin{proof*}...\end{proof*}` environment, as in

Proof (Sketch) This can be derived from simple observations. □

The main differences between the file `entcs.cls` and the `elsartr.cls` file used by Elsevier are the more precise format we use – Elsevier's generic files are meant for preliminary editing, and more precise formatting is imposed using a macro file designed for the specific Elsevier journal in which the paper will eventually appear. The `entcs.cls` and `entcsmacro.sty` files format papers

uniformly so that they all are easily recognizable as being from the series *Electronic Notes in Theoretical Computer Science.*

All of the usual features of LaTeX are available with these style files – it is only the formatting that has been rigorously defined. Thus, one has available the sectioning commands `\section,\subsection, \paragraph` and `\subparagraph`. The numbering scheme used is one under which Theorem 1.2.3 is the third numbered item in second subsection of the first section of the paper. In order to facilitate cross-references, all of the named environments given below are numbered, and all use the same number scheme.

The file `entcsmacro.sty` contains additional information that is needed to typeset a paper. It also has the definitions of the $\mathcal{AMS}$ `euler` and `blackboard bold` fonts builtin. If you want to use symbols for the natural numbers, the reals, etc., then we prefer that you use the blackboard bold fonts, and not plain bold fonts. This is accomplished by using the `\mathbb` font, as in $\mathbb{N}$ or $\mathbb{R}$.

The names of theorem-like environments are provided in `entcsmacro.sty`. With the exception of the environment Algorithm, the names of all of these are full name, rather than a shortened version. The environments provided and their names are

- `\begin{theorem}` ... `\end{theorem}` for Theorems,
- `\begin{lemma}` ... `\end{lemma}` for Lemmas,
- `\begin{corollary}` ... `\end{corollary}` for Corollaries,
- `\begin{proposition}` ... `\end{proposition}` for Propositions,
- `\begin{criterion}` ... `\end{criterion}` for Criteria,
- `\begin{alg}` ... `\end{alg}` for Algorithms,
- `\begin{definition}` ... `\end{definition}` for Definitions,
- `\begin{conjecture}` ... `\end{conjecture}` for Conjectures,
- `\begin{example}` ... `\end{example}` for Examples,
- `\begin{problem}` ... `\end{problem}` for Problems,
- `\begin{remark}` ... `\end{remark}` for Remarks,
- `\begin{note}` ... `\end{note}` for Notes,
- `\begin{claim}` ... `\end{claim}` for Claims,
- `\begin{summary}` ... `\end{summary}` for Summary,
- `\begin{case}` ... `\end{case}` for Cases, and
- `\begin{ack}` ... `\end{ack}` for Acknowledgements.

For example,

Algorithm 1 *Step 1: Write the paper*
Step 2: Format it with the ENTCS macro package
Step 3: Ship the whole thing to the Guest Editors

4 References and Cross-references

All the cross-referencing facilities of LaTeX are supported, so one can use
`\ref{}` and `\cite{}` for cross-references within the paper and for references
to bibliographic items. As is done in this note, the **References** section 6 can
be composed with `\begin{thebibliography}...\end{thebibliography}`.
Alternatively, BibTeX can be used to compile the bibliography. Whichever
one is used, the references are to be numbered consecutively, rather than by
author-defined acronyms. Of course you can use your own acronyms for easy
reference to each of the items in the bibliography, as has been done with the
listing for this short note.

However, note that the references should *not* be started with a new `\section`
command.

The package `hyperref` is automatically loaded by entcs.cls, and this makes
all the cross-references within the document "active" when the pdf file of the
paper is viewed with Adobe's Acrobat© Reader. The format for including
a link is simple: simply insert `\href{URL} {text}` where *URL* is the URL
to which you want the link to point, and *text* is the text you want to be
highlighted, which when clicked upon will bring up the desired web page.

4.1 Particulars about `.pdf` files

We now require that `.pdf` files be provided for publication online. A `.pdf`
file is viewable by Adobe's Acrobat© viewer, which can be configured to load
automatically within a browser. Viewing a properly formatted `.pdf` file with
Acrobat© allows the cross-references and links to URLs to be active. In fact,
Elsevier utilizes `.pdf` files in order to take better advantage of the web's ca-
pabilities.

But one point we want to emphasize is that you should be sure to use Type
1 fonts when you typeset your LaTeX source file. These fonts are scalable,
meaning that they carry information that allows the devise viewing the final
output to scale the fonts to suit the viewer being used – from an onscreen
viewer such as Adobe's Acrobat© Reader, to printing the file on a printer.
You can tell if you have used the right fonts by viewing the final output on
your machine. It the fonts look grainy, then you have not used Type 1 fonts.
They can be located at the CTAN archive `http://www.ctan.org` – they are
public domain fonts, and don't cost anything to add them to your system.

Assuming you have Type 1 fonts available, then there are there methods
for producing `.pdf` files.

Using `dvips` and `ps2pdf`

We list this option first since it appears to be the most reliable and the easiest to use, especially if you include embedded PostScript graphics (`.eps` files) in your source file. Simply run LaTeX2e on your source file, then apply `dvips` to produce a PostScript file, and finally apply `ps2pdf` to obtain a `.pdf` file.

The `DVIPDFM` utility

Another easy method for producing acceptable `.pdf` files is via the utility `dvipdfm`. This utility is included in distributions of MikTeX, which runs on Windows machines, but it probably needs to be added to your teTeX distribution, if you are running LaTeX on a UNIX machine. The utility and precise information about installing it on your system can be found at the web page `http://gaspra.kettering.edu/dvipdfm/`. In essence, this utility converts a `.dvi` file into a `.pdf` file. So, one can first prepare the `.dvi` file using LaTeX, and then apply the utility `dvipdfm` to produce the needed `.pdf` file.[4] This utility makes inclusion of graphics particularly simple – those that are included in the LaTeX source file are simply converted to the `.pdf` format. As we note below, things are not so simple with the second alternative, which is to use pdfLaTeX.

pdfLaTeX

An alternative to the first possibilities to produce `.pdf` files is to process the source file with pdfLaTeX. This format is available from the standard CTAN sites `http://www.ctan.org`. It appears that pdfLaTeX and `hyperref` have some problems when used together. It is necessary to use pdfLaTeX version 14d or later in order to minimize these issues. If your system has an earlier version (most teTeX distributions have version 13d), then you can update your system by retrieving the latest version of pdfLaTeX from `ftp://ftp.cstug.cz/pub/tex/local/cstug/thanh/pdftex/`. Even if the recent versions are used, pdfLaTeX has the same dealing with references embedded with the `frontmatter` section described above for LaTeX.

But there is one aspect of pdfLaTeX that creates problems. Many authors include EPS[5] files within their papers. While this is fairly straightforward with LaTeX, there are a couple of points to note when attempting this with pdfLaTeX.

To include a PostScript image in a `.pdf` file produced with pdfLaTeX, you first have to convert the image to a `.pdf` file, and then it can be included using the same command sequence as above. The conversion can be

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[4] *Beware*! The utility `dvipdf` does *not* produce acceptable `.pdf` files, and should not be used. Only `dvipdfm` should be used to produce `.pdf` files.

[5] EPS stands for *embedded PostScript*, which affords a mechanism for including pre-prepared PostScript files within a LaTeX document.

accomplished most easily using Ghostscript; you can simply view the file in Ghostview and then print the image to a `.pdf` file using the `pdfwriter` option within Ghostview. The result for a standard chess board that is part of the Ghostview distribution is the following image:

Cheq (gift of Adobe Systems) "Chequed Board"   p. 1
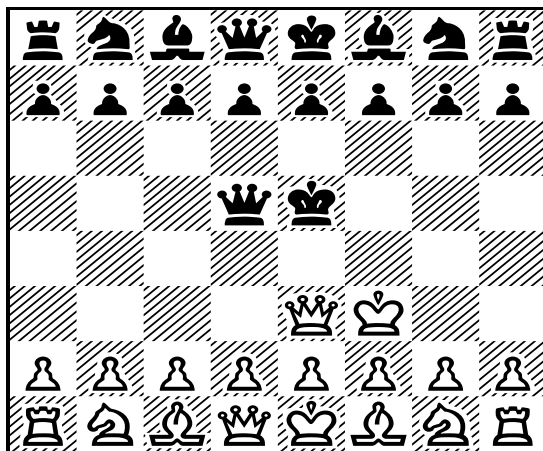
Here as well is a copy of a color image. While pdfLATEX can handle image files in other formats, LATEX can only handle `.eps` images reliably.

It also should be noted that we have included two separate source files for this example file – one for LATEX and one for pdfLATEX – because we want

to illustrate how to insert graphics images into the file. If your paper does not include such images, then the same source file can be formatted by either LaTeX orf by pdfLaTeX.

Using ENTCS Macros with Mac OS X

Of course, if your file doesn't require `.eps` or other PostScript files, then you can create the required `.pdf` file using any of the standard TeX implementations for the Macintosh. If you need to include PostScript files, and if you are using TeXShop, then you can specify to use dvips and ghostview in processing your file, and then you can apply `ps2pdf` to create the needed `.pdf` file. Alternatibely, the Mac OS X operating system is based on UNIX, so it supports the use of teTeX as described above.

5   Summary

The ENTCS macro package is relatively easy to use and provides a uniform layout for all the papers that appear in ENTCS.

Problem 5.1 *Finish your paper and get it to your Program Chairman on time!*

When you have finished preparing your paper, send a copy of the *source file*, together with any macro files that are needed to your Program Chairman. If the files are extensive, you can place copies in the `pub/incoming` sub-directory of the ftp directory on the machine indicated by your Program Chairman using anonymous ftp. If you do this, please send me email to alert me that the file(s) are here.

Assigning Volume / Issue Numbers

One additional point worth mentioning is that ENTCS is moving to ScienceDirect, Elsevier's main platform for publishing electronic series, Because ScienceDirect must publish entire volumes at the same time, we have changed the procedure for preparing final versions so that volume numbers will not be assigned until the final versions are ready. Guest Editors will now have to receive the final version of all papers in their *Proceedings* before a volume and issue number will be assigned for the *Proceedings*. Even with the move to ScienceDirect, the reference scheme already used for publications in ENTCS – `http://www.elsevier/nl/locate/entcs/` `NNnn.html` remains the valid way to cite papers published in ENTCS, where `NN` denotes the number of the volume, and `nn` denotes the issue number. Publications consisting of an entire volume should use `1` as the issue number.

Copyright Transfer Forms

One result of the move to ScienceDirect is that the corresponding author of each paper published in ENTCS must submit a signed Copyright Transfer

Form to Elsevier in order for their paper to be published. A copy of this form will be sent to each author by the Guest Editors of each volume. Details about this agreement specifying the rights of the authors and the rights of Elsevier are available at Elsevier's Author Gateway.

Publication of Final Versions

Because ScienceDirect cannot easily accommodate changes to published material, the Proceedings in its entirety must be ready before it can be published. This is one reason why the volume and issue number is not assigned until the final versions of all papers have been sent to the Guest Editors for final processing.

6 Bibliographical references

ENTCS employs the `plain` style of bibliographic references in which references are listed in alphabetical order, according the the first author's last name, and are sequentially numbered. Please utilize this style. We have a BibTeX style file, for those who wish to use it. It is the file `entcs.bst` which is included in this package. The basic rules we have employed are the following:

- Authors' names should be listed in alphabetical order, with the first author's last name being the first listing, followed by the author's initials or first name, and with the other authors names listed as *first name, last name.*
- Titles of articles in journals should be in *emphasized* type.
- Titles of books, monographs, etc. should be in quotations.
- Journal names should be in plain roman type.
- Journal volume numbers should be in boldface type, with the year of publication immediately following in roman type, and enclosed in parentheses.
- References to URLs on the net should be "active" and the URL itself should be in typewriter font.
- Articles should include page numbers.

The criteria are illustrated in the following.

References

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