

Letterlike Symbols

Range: 2100–214F

This file contains an excerpt from the character code tables and list of character names for the Unicode Standard, last updated for
The Unicode Standard, Version 4.0.

This file may be updated as necessary to reflect errata without notice. For an up-to-date list of errata, see <http://www.unicode.org/errata/>

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These charts are provided as the on-line reference to the character contents of the Unicode Standard, Version 4.0 but do not provide all the information needed to fully support individual scripts using the Unicode Standard. For a complete understanding of the use of the characters contained in this excerpt file, please consult the appropriate sections of The Unicode Standard, Version 4.0 (ISBN 0-321-18578-1), as well as Unicode Standard Annexes #9, #11, #14, #15, #24 and #29, the other Unicode Technical Reports and the Unicode Character Database, which are available on-line.

See <http://www.unicode.org/Public/UNIDATA/UCD.html> and <http://www.unicode.org/reports/>

A thorough understanding of the information contained in these additional sources is required for a successful implementation.

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See <http://www.unicode.org/pending/pending.html> and <http://www.unicode.org/alloc/Pipeline.html>.

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	210	211	212	213	214
0	α/c 2100	\mathcal{I} 2110	SM 2120	\mathcal{E} 2130	Σ 2140
1	α/s 2101	\mathcal{J} 2111	TEL 2121	\mathcal{F} 2131	\mathcal{G} 2141
2	\mathbb{C} 2102	\mathcal{L} 2112	TM 2122	\mathcal{H} 2132	\mathcal{T} 2142
3	$^{\circ}\text{C}$ 2103	ℓ 2113	\mathcal{V} 2123	\mathcal{M} 2133	\mathcal{J} 2143
4	\mathcal{C} 2104	\mathcal{W} 2114	\mathcal{Z} 2124	e 2134	\mathcal{A} 2144
5	\mathcal{C}/o 2105	\mathcal{N} 2115	\mathcal{Z} 2125	\mathcal{X} 2135	\mathcal{D} 2145
6	\mathcal{C}/u 2106	No 2116	Ω 2126	\mathcal{C} 2136	\mathcal{d} 2146
7	\mathcal{E} 2107	\mathcal{P} 2117	\mathcal{U} 2127	\mathcal{L} 2137	e 2147
8	\mathcal{D} 2108	\mathcal{P} 2118	\mathcal{Z} 2128	\mathcal{T} 2138	\mathcal{I} 2148
9	$^{\circ}\text{F}$ 2109	\mathcal{P} 2119	\mathcal{I} 2129	\mathcal{I} 2139	\mathcal{J} 2149
A	\mathcal{J} 210A	\mathcal{Q} 211A	\mathcal{K} 212A	\mathcal{O} 213A	\mathcal{P} 214A
B	\mathcal{H} 210B	\mathcal{R} 211B	\mathcal{A} 212B	FAX 213B	\mathcal{X} 214B
C	\mathcal{H} 210C	\mathcal{R} 211C	\mathcal{B} 212C		
D	\mathcal{H} 210D	\mathcal{R} 211D	\mathcal{C} 212D	\mathcal{Y} 213D	
E	h 210E	\mathcal{R} 211E	e 212E	\mathcal{T} 213E	
F	h 210F	\mathcal{R} 211F	e 212F	\mathcal{T} 213F	

Letterlike symbols

Some of the letterlike symbols are intended to complete the set of mathematical alphanumeric symbols starting at U+1D400.

2100	‰	ACCOUNT OF ≈ 0061 a 002F / 0063 c
2101	‱	ADDRESSED TO THE SUBJECT ≈ 0061 a 002F / 0073 s
2102	ℂ	DOUBLE-STRUCK CAPITAL C = the set of complex numbers ≈ 0043 C latin capital letter c
2103	°C	DEGREE CELSIUS = degrees Centigrade ≈ 00B0 ° 0043 C
2104	¢	CENTRE LINE SYMBOL = clone
2105	‰	CARE OF ≈ 0063 c 002F / 006F o
2106	‰	CADA UNA ≈ 0063 c 002F / 0075 u
2107	ℰ	EULER CONSTANT → 0045 E latin capital letter e ≈ 0190 E latin capital letter open e
2108	ℰ	SCRUPLE
2109	°F	DEGREE FAHRENHEIT ≈ 00B0 ° 0046 F
210A	ℓ	SCRIPT SMALL G = real number symbol ≈ 0067 g latin small letter g
210B	ℋ	SCRIPT CAPITAL H = Hamiltonian function ≈ 0048 H latin capital letter h
210C	ℋ	BLACK-LETTER CAPITAL H = Hilbert space ≈ 0048 H latin capital letter h
210D	ℋ	DOUBLE-STRUCK CAPITAL H ≈ 0048 H latin capital letter h
210E	ℏ	PLANCK CONSTANT ≈ 0068 h latin small letter h
210F	ℏ	PLANCK CONSTANT OVER TWO PI → 045B ℏ cyrillic small letter tshe ≈ 0127 ℏ latin small letter h with stroke
2110	ℐ	SCRIPT CAPITAL I ≈ 0049 I latin capital letter i
2111	ℐ	BLACK-LETTER CAPITAL I = imaginary part ≈ 0049 I latin capital letter i
2112	ℒ	SCRIPT CAPITAL L = Laplace symbol ≈ 004C L latin capital letter l

2113	ℓ	SCRIPT SMALL L = mathematical symbol 'ell' = liter (traditional symbol) • despite its character name, this symbol is derived from a special italicized version of the small letter l • the SI recommended symbol for liter is 006C l → 1D4C1 / mathematical script small l ≈ 006C l latin small letter l
2114	℔	L B BAR SYMBOL = pounds
2115	ℕ	DOUBLE-STRUCK CAPITAL N = natural number ≈ 004E N latin capital letter n
2116	№	NUMERO SIGN ≈ 004E N 006F o
2117	®	SOUND RECORDING COPYRIGHT = published = phonorecord sign → 00A9 © copyright sign
2118	℘	SCRIPT CAPITAL P = Weierstrass elliptic function • actually this has the form of a lowercase calligraphic p, despite its name
2119	ℙ	DOUBLE-STRUCK CAPITAL P ≈ 0050 P latin capital letter p
211A	ℚ	DOUBLE-STRUCK CAPITAL Q = the set of rational numbers ≈ 0051 Q latin capital letter q
211B	ℛ	SCRIPT CAPITAL R = Riemann Integral ≈ 0052 R latin capital letter r
211C	℞	BLACK-LETTER CAPITAL R = real part ≈ 0052 R latin capital letter r
211D	ℝ	DOUBLE-STRUCK CAPITAL R = the set of real numbers ≈ 0052 R latin capital letter r
211E	℞	PRESCRIPTION TAKE = recipe = cross ratio
211F	℞	RESPONSE
2120	SM	SERVICE MARK ≈ <sup> 0053 S 004D M
2121	TEL	TELEPHONE SIGN ≈ 0054 T 0045 E 004C L
2122	TM	TRADE MARK SIGN ≈ <sup> 0054 T 004D M
2123	℣	VERSICLE
2124	ℤ	DOUBLE-STRUCK CAPITAL Z = the set of integers ≈ 005A Z latin capital letter z
2125	℥	OUNCE SIGN → 021D ȝ latin small letter yogh

- 2126 Ω OHM SIGN
 • SI unit of resistance, named after G. S. Ohm, German physicist
 • preferred representation is 03A9 Ω
 \approx 03A9 Ω greek capital letter omega
- 2127 ⋈ INVERTED OHM SIGN
 = MHO
 • archaic unit of conductance (= the SI unit siemens)
 • typographically a turned greek capital letter omega
 \rightarrow 01B1 ⋈ latin capital letter upsilon
 \rightarrow 03A9 Ω greek capital letter omega
- 2128 \mathbb{Z} BLACK-LETTER CAPITAL Z
 \approx 005A Z latin capital letter z
- 2129 Ⲁ TURNED GREEK SMALL LETTER IOTA
 • unique element fulfilling a description (logic)
 \rightarrow 03B9 Ⲁ greek small letter iota
- 212A K KELVIN SIGN
 \approx 004B K latin capital letter k
- 212B Å ÅNGSTRÖM SIGN
 • non SI length unit (=0.1 nm) named after A. J. Ångström, Swedish physicist
 • preferred representation is 00C5 Å
 \approx 00C5 Å latin capital letter a with ring above
- 212C \mathcal{B} SCRIPT CAPITAL B
 = Bernoulli function
 \approx 0042 B latin capital letter b
- 212D \mathfrak{C} BLACK-LETTER CAPITAL C
 \approx 0043 C latin capital letter c
- 212E e ESTIMATED SYMBOL
 • used in European packaging
 \rightarrow 0065 e latin small letter e
- 212F e SCRIPT SMALL E
 = error
 \approx 0065 e latin small letter e
- 2130 \mathcal{E} SCRIPT CAPITAL E
 = emf (electromotive force)
 \approx 0045 E latin capital letter e
- 2131 \mathcal{F} SCRIPT CAPITAL F
 = Fourier transform
 \approx 0046 F latin capital letter f
- 2132 ⱦ TURNED CAPITAL F
 \rightarrow 0046 F latin capital letter f
- 2133 \mathcal{M} SCRIPT CAPITAL M
 = M-matrix (physics)
 = German Mark (not the current Deutsche Mark)
 \approx 004D M latin capital letter m
- 2134 o SCRIPT SMALL O
 = order, of inferior order to
 \approx 006F o latin small letter o

Hebrew letterlike math symbols

There are left-to-right characters.

- 2135 \aleph ALEF SYMBOL
 = first transfinite cardinal (countable)
 \approx 05D0 \aleph hebrew letter alef
- 2136 \beth BET SYMBOL
 = second transfinite cardinal (the continuum)
 \approx 05D1 \beth hebrew letter bet
- 2137 \gimel GIMEL SYMBOL
 = third transfinite cardinal (functions of a real variable)
 \approx 05D2 \gimel hebrew letter gimel
- 2138 \daleth DALET SYMBOL
 = fourth transfinite cardinal
 \approx 05D3 \daleth hebrew letter dalet

Additional letterlike symbols

- 2139 i INFORMATION SOURCE
 • intended for use with 20DD Ⓢ
 \approx 0069 i latin small letter i
- 213A Ⓢ ROTATED CAPITAL Q
 • a binding signature mark
- 213B FAX FACSIMILE SIGN
 \rightarrow 2121 TEL telephone sign
 \approx 0046 F 0041 A 0058 X
- 213C Ⓢ <reserved>
- 213D γ DOUBLE-STRUCK SMALL GAMMA
 \approx 03B3 γ greek small letter gamma
- 213E Γ DOUBLE-STRUCK CAPITAL GAMMA
 \approx 0393 Γ greek capital letter gamma
- 213F Π DOUBLE-STRUCK CAPITAL PI
 \approx 03A0 Π greek capital letter pi

Double-struck large operator

- 2140 Σ DOUBLE-STRUCK N-ARY SUMMATION
 \approx 2211 Σ n-ary summation

Additional letterlike symbols

- 2141 Ⓔ TURNED SANS-SERIF CAPITAL G
 = game
- 2142 Ⓕ TURNED SANS-SERIF CAPITAL L
- 2143 Ⓖ REVERSED SANS-SERIF CAPITAL L
- 2144 Ⓐ TURNED SANS-SERIF CAPITAL Y

Double-struck italic mathematical symbols

These stylized mathematical symbols are used in some documents to distinguish special mathematical usages from ordinary variables.

- 2145 Ⓓ DOUBLE-STRUCK ITALIC CAPITAL D
 • sometimes used for the differential
 \approx 0044 D latin capital letter d
- 2146 Ⓗ DOUBLE-STRUCK ITALIC SMALL D
 • sometimes used for the differential
 \approx 0064 d latin small letter d

- 2147 *e* DOUBLE-STRUCK ITALIC SMALL E
• sometimes used for the natural exponent
≈ 0065 e latin small letter e
- 2148 *i* DOUBLE-STRUCK ITALIC SMALL I
• sometimes used for the imaginary unit
≈ 0069 i latin small letter i
- 2149 *j* DOUBLE-STRUCK ITALIC SMALL J
• sometimes used for the imaginary unit
≈ 006A j latin small letter j

Additional letterlike symbols

- 214A *ℙ* PROPERTY LINE
- 214B *℔* TURNED AMPERSAND
• used in linear logic
→ 0026 & ampersand