

Letterlike Symbols

Range: 2100–214F

This file contains an excerpt from the character code tables and list of character names for *The Unicode Standard, Version 5.0*.

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See <http://www.unicode.org/charts/> for access to a complete list of the latest character code charts. See <http://www.unicode.org/charts/PDF/Unicode-5.0/> for charts showing only the characters added in Unicode 5.0. See <http://www.unicode.org/Public/5.0.0/charts/> for a complete archived file of character code charts for Unicode 5.0.

Disclaimer

These charts are provided as the on-line reference to the character contents of the Unicode Standard, Version 5.0 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 file, please consult the appropriate sections of The Unicode Standard, Version 5.0 (ISBN 0-321-48091-0), online at <http://www.unicode.org/versions/Unicode5.0.0/>, as well as Unicode Standard Annexes #9, #11, #14, #15, #24, #29, #31, and #34, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available on-line.

See <http://www.unicode.org/ucd/> 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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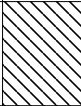
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	210	211	212	213	214
0	<i>a/c</i> 2100	<i>J</i> 2110	SM 2120	<i>E</i> ^o 2130	Σ 2140
1	<i>a/s</i> 2101	<i>J</i> 2111	TEL 2121	<i>F</i> 2131	G 2141
2	C 2102	<i>L</i> 2112	TM 2122	H 2132	I 2142
3	$^{\circ}\text{C}$ 2103	<i>l</i> 2113	V 2123	<i>M</i> 2133	J 2143
4	E 2104	W 2114	Z 2124	<i>e</i> 2134	A 2144
5	<i>%</i> 2105	N 2115	Z 2125	X 2135	D 2145
6	<i>%u</i> 2106	N_o 2116	Ω 2126	C 2136	<i>d</i> 2146
7	E 2107	P 2117	U 2127	A 2137	<i>e</i> 2147
8	D 2108	P 2118	Z 2128	I 2138	<i>i</i> 2148
9	$^{\circ}\text{F}$ 2109	P 2119	I 2129	i 2139	<i>j</i> 2149
A	<i>J</i> 210A	Q 211A	K 212A	O 213A	P 214A
B	<i>H</i> 210B	<i>R</i> 211B	A 212B	FAX 213B	D 214B
C	H 210C	R 211C	<i>B</i> 212C	π 213C	P 214C
D	H 210D	R 211D	C 212D	γ 213D	<i>A/s</i> 214D
E	<i>h</i> 210E	R 211E	<i>e</i> 212E	I 213E	H 214E
F	<i>h</i> 210F	R 211F	<i>e</i> 212F	I 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	2114	£	L B BAR SYMBOL = pounds → 0023 # number sign
2101	‱	ADDRESSED TO THE SUBJECT → 214D ‱ aktieselskab ≈ 0061 a 002F / 0073 s	2115	ℕ	DOUBLE-STRUCK CAPITAL N = natural number ≈ 004E N latin capital letter n
2102	ℂ	DOUBLE-STRUCK CAPITAL C = the set of complex numbers ≈ 0043 C latin capital letter c	2116	№	NUMERO SIGN ≈ 004E N 006F o
2103	°C	DEGREE CELSIUS = degrees Centigrade ≈ 00B0 ° 0043 C	2117	©	SOUND RECORDING COPYRIGHT = published = phonorecord sign → 00A9 © copyright sign → 24C5 © circled latin capital letter p
2104	¢	CENTRE LINE SYMBOL = clone	2118	℘	SCRIPT CAPITAL P = Weierstrass elliptic function • actually this has the form of a lowercase calligraphic p, despite its name
2105	‰	CARE OF ≈ 0063 c 002F / 006F o	2119	ℙ	DOUBLE-STRUCK CAPITAL P ≈ 0050 P latin capital letter p
2106	‰	CADA UNA ≈ 0063 c 002F / 0075 u	211A	ℚ	DOUBLE-STRUCK CAPITAL Q = the set of rational numbers ≈ 0051 Q latin capital letter q
2107	ℰ	EULER CONSTANT → 0045 E latin capital letter e ≈ 0190 ℰ latin capital letter open e	211B	℞	SCRIPT CAPITAL R = Riemann Integral ≈ 0052 R latin capital letter r
2108	♻	SCRUPLE	211C	ℛ	BLACK-LETTER CAPITAL R = real part ≈ 0052 R latin capital letter r
2109	°F	DEGREE FAHRENHEIT ≈ 00B0 ° 0046 F	211D	℞	DOUBLE-STRUCK CAPITAL R = the set of real numbers ≈ 0052 R latin capital letter r
210A	ƒ	SCRIPT SMALL G = real number symbol ≈ 0067 g latin small letter g	211E	℞	PRESCRIPTION TAKE = recipe = cross ratio
210B	ℋ	SCRIPT CAPITAL H = Hamiltonian operator ≈ 0048 H latin capital letter h	211F	℞	RESPONSE
210C	ℋ	BLACK-LETTER CAPITAL H = Hilbert space ≈ 0048 H latin capital letter h	2120	SM	SERVICE MARK ≈ <sup> 0053 S 004D M
210D	ℋ	DOUBLE-STRUCK CAPITAL H ≈ 0048 H latin capital letter h	2121	TEL	TELEPHONE SIGN • typical forms for this symbol may use lower case, small caps or superscripted letter shapes → 260E ☎ black telephone → 2706 ☎ telephone location sign ≈ 0054 T 0045 E 004C L
210E	h	PLANCK CONSTANT = height, specific enthalpy, ... • simply a mathematical italic h; this character's name results from legacy usage ≈ 0068 h latin small letter h	2122	TM	TRADE MARK SIGN ≈ <sup> 0054 T 004D M
210F	ħ	PLANCK CONSTANT OVER TWO PI → 045B ħ cyrillic small letter tshe ≈ 0127 ħ latin small letter h with stroke	2123	℣	VERSICLE
2110	ℐ	SCRIPT CAPITAL I ≈ 0049 I latin capital letter i	2124	ℤ	DOUBLE-STRUCK CAPITAL Z = the set of integers ≈ 005A Z latin capital letter z
2111	ℑ	BLACK-LETTER CAPITAL I = imaginary part ≈ 0049 I latin capital letter i	2125	℥	OUNCE SIGN → 021D 3 latin small letter yogh
2112	ℒ	SCRIPT CAPITAL L = Laplace transform ≈ 004C L latin capital letter l	2126	Ω	OHM SIGN • SI unit of resistance, named after G. S. Ohm, German physicist • preferred representation is 03A9 Ω ≡ 03A9 Ω greek capital letter omega
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 ℓ mathematical script small l ≈ 006C l latin small letter l	2127	℧	INVERTED OHM SIGN = mho • archaic unit of conductance (= the SI unit siemens) • typographically a turned greek capital letter omega → 01B1 ℧ latin capital letter upsilon → 03A9 Ω greek capital letter omega

- 2128 \mathfrak{Z} BLACK-LETTER CAPITAL Z
 \approx 005A Z latin capital letter z
- 2129 ι TURNED GREEK SMALL LETTER IOTA
 • unique element fulfilling a description (logic)
 \rightarrow 03B9 ι greek small letter iota
- 212A \mathfrak{K} KELVIN SIGN
 \equiv 004B K latin capital letter k
- 212B \AA ANGSTROM SIGN
 • non SI length unit (=0.1 nm) named after A. J. Ångström, Swedish physicist
 • preferred representation is 00C5 \AA
 \equiv 00C5 \AA 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
 $=$ natural exponent
 \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 \mathfrak{D} TURNED CAPITAL F
 $=$ Claudian digamma inversum
 • lowercase is 214E \mathfrak{d}
 \rightarrow 0046 F latin capital letter f
 \rightarrow 03DC \mathfrak{F} greek letter digamma
- 2133 \mathcal{M} SCRIPT CAPITAL M
 $=$ M-matrix (physics)
 $=$ German Mark currency symbol, before WWII
 \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

These 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 \mathfrak{i} INFORMATION SOURCE
 • intended for use with 20DD $\text{\textcircled{C}}$
 \approx 0069 i latin small letter i
- 213A \mathfrak{Q} ROTATED CAPITAL Q
 • a binding signature mark

- 213B $\text{\textcircled{F}}$ FACSIMILE SIGN
 • typical forms for this symbol may use lower case, small caps or superscripted letter shapes
 \rightarrow 2121 $\text{\textcircled{TEL}}$ telephone sign
 \approx 0046 F 0041 A 0058 X
- 213C $\mathfrak{\pi}$ DOUBLE-STRUCK SMALL PI
 \approx 03C0 π greek small letter pi
- 213D $\mathfrak{\gamma}$ DOUBLE-STRUCK SMALL GAMMA
 \approx 03B3 γ greek small letter gamma
- 213E $\mathfrak{\Gamma}$ DOUBLE-STRUCK CAPITAL GAMMA
 \approx 0393 Γ greek capital letter gamma
- 213F $\mathfrak{\Pi}$ DOUBLE-STRUCK CAPITAL PI
 \approx 03A0 Π greek capital letter pi

Double-struck large operator

- 2140 $\mathfrak{\Sigma}$ DOUBLE-STRUCK N-ARY SUMMATION
 \approx 2211 Σ n-ary summation

Additional letterlike symbols

- 2141 \mathfrak{G} TURNED SANS-SERIF CAPITAL G
 $=$ game
- 2142 \mathfrak{L} TURNED SANS-SERIF CAPITAL L
- 2143 \mathfrak{J} REVERSED SANS-SERIF CAPITAL L
- 2144 \mathfrak{Y} TURNED SANS-SERIF CAPITAL Y

Double-struck italic math symbols

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

- 2145 \mathfrak{D} DOUBLE-STRUCK ITALIC CAPITAL D
 • sometimes used for the differential
 \approx 0044 D latin capital letter d
- 2146 \mathfrak{d} DOUBLE-STRUCK ITALIC SMALL D
 • sometimes used for the differential
 \approx 0064 d latin small letter d
- 2147 \mathfrak{e} DOUBLE-STRUCK ITALIC SMALL E
 • sometimes used for the natural exponent
 \approx 0065 e latin small letter e
- 2148 \mathfrak{i} DOUBLE-STRUCK ITALIC SMALL I
 • sometimes used for the imaginary unit
 \approx 0069 i latin small letter i
- 2149 \mathfrak{j} DOUBLE-STRUCK ITALIC SMALL J
 • sometimes used for the imaginary unit
 \approx 006A j latin small letter j

Additional letterlike symbols

- 214A \mathfrak{P} PROPERTY LINE
- 214B \mathfrak{A} TURNED AMPERSAND
 • used in linear logic
 \rightarrow 0026 & ampersand
- 214C \mathfrak{P} PER SIGN
 • abbreviates the word 'per'
- 214D $\mathfrak{\%}$ AKTIESELSKAB
 \rightarrow 2101 $\mathfrak{\%}$ addressed to the subject

Lowercase Claudian letter

Claudian letters in inscriptions are uppercase, but may be transcribed by scholars in lowercase.

- 214E \mathfrak{d} TURNED SMALL F
 • uppercase is 2132 \mathfrak{D}
 \rightarrow 03DD \mathfrak{F} greek small letter digamma