

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 16.0*

This file may be changed at any time without notice to reflect errata, or other updates to the Unicode Standard. See <https://www.unicode.org/errata/> for an up-to-date list of errata.

See <https://www.unicode.org/charts/> for access to a complete list of the latest character code charts. See <https://www.unicode.org/charts/PDF/Unicode-16.0/> for charts showing only the characters added in Unicode 16.0. See <https://www.unicode.org/Public/16.0.0/charts/> for a complete archived file of character code charts for Unicode 16.0. See <https://www.unicode.org/charts/About.html#Conventions> for conventions used in these code charts, and other general information.

Disclaimer

These charts are provided as the online reference to the character contents of the Unicode Standard, Version 16.0 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 16.0, online at <https://www.unicode.org/versions/Unicode16.0.0/>, as well as the Unicode Standard Annexes, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available online.

See <https://www.unicode.org/ucd/> and <https://www.unicode.org/reports/>

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

Fonts

The shapes of the reference glyphs used in these code charts are not prescriptive. Considerable variation is to be expected in actual fonts.

See <https://www.unicode.org/charts/fonts.html> for a list.

Terms of Use

© 1991–2024 Unicode, Inc. This publication is protected by copyright, and permission must be obtained from Unicode, Inc. prior to any reproduction, modification, or other use not permitted by the Terms of Use (<https://www.unicode.org/copyright.html>). Specifically, you may make copies of this publication and may annotate and translate it solely for personal or internal business purposes and not for public distribution, provided that any such permitted copies and modifications fully reproduce all copyright and other legal notices contained in the original. You may not make copies of or modifications to this publication for public distribution, or incorporate it in whole or in part into any product or publication without the express written permission of Unicode.

The Unicode Consortium specifically grants ISO a license to produce such code charts with their associated character names list to show the repertoire of characters for that standard, as a normatively referenced, integral part of that standard.

Unicode uses most fonts under restricted license from the original font owner. You may not extract, copy, modify, or distribute fonts or font data from any Unicode Products, including this publication, without license from the font owner.

Use of all Unicode Products, including this publication, is governed by the Unicode Terms of Use (<https://www.unicode.org/copyright.html>). The authors, contributors, and publishers have taken care in the preparation of this publication, but make no express or implied representation or warranty of any kind and assume no responsibility or liability for errors or omissions or for consequential or incidental damages that may arise therefrom. This publication is provided “AS-IS” without charge as a convenience to users.

Unicode and the Unicode Logo are registered trademarks of Unicode, Inc., in the United States and other countries.

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

Letterlike symbols

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

- 2100 $\%$ **ACCOUNT OF**
 ≈ 0061 a 002F / 0063 c
- 2101 $\%$ **ADDRESSED TO THE SUBJECT**
 = aux soins (de)
 → 214D $\%$ aktieselskab
 ≈ 0061 a 002F / 0073 s
- 2102 **C** **DOUBLE-STRUCK CAPITAL C**
 = the set of complex numbers
 ≈ 0043 **C** latin capital letter c
- 2103 $^{\circ}\text{C}$ **DEGREE CELSIUS**
 = degrees centigrade
 ≈ 00B0 $^{\circ}$ 0043 **C**
- 2104 € **CENTRE LINE SYMBOL**
 = clone
- 2105 $\%$ **CARE OF**
 ≈ 0063 c 002F / 006F o
- 2106 $\%$ **CADA UNA**
 • Spanish for “each one”
 ≈ 0063 c 002F / 0075 u
- 2107 E **EULER CONSTANT**
 → 0045 **E** latin capital letter e
 ≈ 0190 E latin capital letter open e
- 2108 D **SCRUPLE**
- 2109 $^{\circ}\text{F}$ **DEGREE FAHRENHEIT**
 ≈ 00B0 $^{\circ}$ 0046 **F**
- 210A g **SCRIPT SMALL G**
 = real number symbol
 ≈ 0067 **g** latin small letter g
- 210B \mathcal{H} **SCRIPT CAPITAL H**
 = Hamiltonian operator
 ~ 210B FE00 \mathcal{H} chancery style
 ~ 210B FE01 \mathcal{H} roundhand style
 ≈ 0048 **H** latin capital letter h
- 210C \mathfrak{H} **BLACK-LETTER CAPITAL H**
 = Hilbert space
 ≈ 0048 **H** latin capital letter h
- 210D \mathbb{H} **DOUBLE-STRUCK CAPITAL H**
 ≈ 0048 **H** latin capital letter h
- 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
- 210F \hbar **PLANCK CONSTANT OVER TWO PI**
 = reduced Planck constant, Dirac constant
 → 045B \hbar cyrillic small letter tshe
 ≈ 0127 **h** latin small letter h with stroke
- 2110 \mathcal{I} **SCRIPT CAPITAL I**
 ~ 2110 FE00 \mathcal{I} chancery style
 ~ 2110 FE01 \mathcal{I} roundhand style
 ≈ 0049 **I** latin capital letter i
- 2111 \mathfrak{I} **BLACK-LETTER CAPITAL I**
 = imaginary part
 ≈ 0049 **I** latin capital letter i
- 2112 \mathcal{L} **SCRIPT CAPITAL L**
 = Laplace transform
 ~ 2112 FE00 \mathcal{L} chancery style
 ~ 2112 FE01 \mathcal{L} roundhand style
 ≈ 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** or 004C **L**
 → 1D4C1 ℓ mathematical script small l
 ≈ 006C **l** latin small letter l
- 2114 £ **L B BAR SYMBOL**
 = pounds
 → 0023 $\#$ number sign
- 2115 \mathbb{N} **DOUBLE-STRUCK CAPITAL N**
 = natural number
 • a glyph variant with doubled vertical strokes exists
 ≈ 004E **N** latin capital letter n
- 2116 № **NUMERO SIGN**
 → 0023 $\#$ number sign
 → 00BA $^{\circ}$ masculine ordinal indicator
 ≈ 004E **N** 006F o
- 2117 © **SOUND RECORDING COPYRIGHT**
 = published
 = phonorecord sign
 → 00A9 © copyright sign
 → 24C5 P circled latin capital letter p
- 2118 \wp **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 \mathbb{Q} **DOUBLE-STRUCK CAPITAL Q**
 = the set of rational numbers
 ≈ 0051 **Q** latin capital letter q
- 211B \mathcal{R} **SCRIPT CAPITAL R**
 = Riemann Integral
 ~ 211B FE00 \mathcal{R} chancery style
 ~ 211B FE01 \mathcal{R} roundhand style
 ≈ 0052 **R** latin capital letter r
- 211C \Re **BLACK-LETTER CAPITAL R**
 = real part
 ≈ 0052 **R** latin capital letter r
- 211D \mathbb{R} **DOUBLE-STRUCK CAPITAL R**
 = the set of real numbers
 ≈ 0052 **R** latin capital letter r
- 211E R **PRESCRIPTION TAKE**
 = recipe
 = cross ratio
- 211F R **RESPONSE**
- 2120 SM **SERVICE MARK**
 ≈ <sup> 0053 **S** 004D **M**
- 2121 TEL **TELEPHONE SIGN**
 • typical forms for this symbol may use lowercase, small caps or superscripted letter shapes
 → 260E ☎ black telephone
 → 2706 📍 telephone location sign
 → 1F4DE ☎ telephone receiver
 ≈ 0054 **T** 0045 **E** 004C **L**
- 2122 TM **TRADE MARK SIGN**
 → 1F12E ® circled wz
 ≈ <sup> 0054 **T** 004D **M**
- 2123 V **VERSICLE**

- 2124 \mathbb{Z} **DOUBLE-STRUCK CAPITAL Z**
= the set of integers
≈ 005A **Z** latin capital letter z
- 2125 ʒ **OUNCE SIGN**
→ 0292 ʒ latin small letter ezh
→ 1F773 ʒ alchemical symbol for half ounce
→ 2CF04 ʒ
- 2126 Ω **OHM SIGN**
• SI unit of resistance, named after G. S. Ohm, German physicist
• preferred representation is 03A9 Ω
→ 260A Ω ascending node
≡ 03A9 Ω greek capital letter omega
- 2127 ɔ **INVERTED OHM SIGN**
= mho
• archaic unit of conductance (= the SI unit siemens)
• typographically a turned greek capital letter omega
→ 01B1 O latin capital letter upsilon
→ 03A9 Ω greek capital letter omega
→ 260B ɔ descending node
- 2128 \mathbb{Z} **BLACK-LETTER CAPITAL Z**
≈ 005A **Z** latin capital letter z
- 2129 ı **TURNED GREEK SMALL LETTER IOTA**
• unique element fulfilling a description (logic)
→ 03B9 ı greek small letter iota
- 212A **K** **KELVIN SIGN**
≡ 004B **K** latin capital letter k
- 212B Å **ANGSTROM SIGN**
• non SI length unit (=0.1 nm) named after A. J. Ångström, Swedish physicist
• preferred representation is 00C5 Å
≡ 00C5 Å latin capital letter a with ring above
- 212C \mathcal{B} **SCRIPT CAPITAL B**
= Bernoulli function
~ 212C FE00 \mathcal{B} chancery style
~ 212C FE01 \mathcal{B} roundhand style
≈ 0042 **B** latin capital letter b
- 212D \mathbb{C} **BLACK-LETTER CAPITAL C**
≈ 0043 **C** latin capital letter c
- 212E e **ESTIMATED SYMBOL**
• used in European packaging
→ 0065 e latin small letter e
- 212F e **SCRIPT SMALL E**
= error
= natural exponent
≈ 0065 e latin small letter e
- 2130 \mathcal{E} **SCRIPT CAPITAL E**
= emf (electromotive force)
~ 2130 FE00 \mathcal{E} chancery style
~ 2130 FE01 \mathcal{E} roundhand style
≈ 0045 **E** latin capital letter e
- 2131 \mathcal{F} **SCRIPT CAPITAL F**
= Fourier transform
~ 2131 FE00 \mathcal{F} chancery style
~ 2131 FE01 \mathcal{F} roundhand style
≈ 0046 **F** latin capital letter f
- 2132 Ƀ **TURNED CAPITAL F**
= Claudian digamma inversum
• lowercase is 214E Ƀ
→ 0046 **F** latin capital letter f
→ 03DC **F** greek letter digamma

- 2133 \mathcal{M} **SCRIPT CAPITAL M**
= M-matrix (physics)
= German Mark currency symbol, before WWII
• when used for the Mark symbol, the range of glyph variation is restricted
→ 20BB ₯ nordic mark sign
~ 2133 FE00 \mathcal{M} chancery style
~ 2133 FE01 \mathcal{M} roundhand style
≈ 004D **M** latin capital letter m
- 2134 o **SCRIPT SMALL O**
= order, of inferior order to
≈ 006F o latin small letter o

Hebrew letterlike math symbols*These are left-to-right characters.*

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

Additional letterlike symbols

- 2139 **i** **INFORMATION SOURCE**
• intended for use with 20DD Ⓢ
→ 1F6C8 Ⓢ circled information source
≈ 0069 **i** latin small letter i
- 213A Q **ROTATED CAPITAL Q**
• a binding signature mark
- 213B FAX **FACSIMILE SIGN**
• typical forms for this symbol may use lowercase, small caps or superscripted letter shapes
→ 2121 TEL telephone sign
→ 1F4E0 FAX fax machine
≈ 0046 **F** 0041 **A** 0058 **X**
- 213C π **DOUBLE-STRUCK SMALL PI**
≈ 03C0 π greek small letter pi
- 213D γ **DOUBLE-STRUCK SMALL GAMMA**
≈ 03B3 γ greek small letter gamma
- 213E Γ **DOUBLE-STRUCK CAPITAL GAMMA**
≈ 0393 Γ greek capital letter gamma
- 213F Π **DOUBLE-STRUCK CAPITAL PI**
≈ 03A0 Π greek capital letter pi

Double-struck large operator

- 2140 Σ **DOUBLE-STRUCK N-ARY SUMMATION**
≈ 2211 Σ n-ary summation

Additional letterlike symbols

- 2141 G **TURNED SANS-SERIF CAPITAL G**
= game
→ A4E8 G lisu letter hha
- 2142 L **TURNED SANS-SERIF CAPITAL L**
→ A4F6 L lisu letter uh
- 2143 J **REVERSED SANS-SERIF CAPITAL L**
- 2144 Y **TURNED SANS-SERIF CAPITAL Y**
→ 11FB0 Y lisu letter yha

Double-struck italic math symbols

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

- 2145 *ℒ* DOUBLE-STRUCK ITALIC CAPITAL D
 • sometimes used for the differential
 ≈ 0044 ℒ latin capital letter d
- 2146 *ℓ* DOUBLE-STRUCK ITALIC SMALL D
 • sometimes used for the differential
 ≈ 0064 ℓ 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 *ℐ* DOUBLE-STRUCK ITALIC SMALL J
 • sometimes used for the imaginary unit
 ≈ 006A ℐ latin small letter j

Additional letterlike symbols

- 214A *℔* PROPERTY LINE
- 214B *ℕ* TURNED AMPERSAND
 • used in linear logic
 → 0026 & ampersand
- 214C *ℙ* PER SIGN
 • abbreviates the word ‘per’
- 214D *℥* AKTIESELSKAB
 → 2101 ℥ addressed to the subject

Lowercase Claudian letter

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

- 214E *Ϝ* TURNED SMALL F
 • uppercase is 2132 ϝ
 → 03DD Ϝ greek small letter digamma

Biblical editorial symbol

- 214F *𐤀* SYMBOL FOR SAMARITAN SOURCE

Standardized Variation Sequences	
210B	<i>H</i> SCRIPT CAPITAL H
	210B <i>H</i> chancery style
	210B FE00 <i>H</i> roundhand style
	210B FE01
2110	<i>I</i> SCRIPT CAPITAL I
	2110 <i>I</i> chancery style
	2110 FE00 <i>I</i> roundhand style
	2110 FE01
2112	<i>L</i> SCRIPT CAPITAL L
	2112 <i>L</i> chancery style
	2112 FE00 <i>L</i> roundhand style
	2112 FE01
211B	<i>R</i> SCRIPT CAPITAL R
	211B <i>R</i> chancery style
	211B FE00 <i>R</i> roundhand style
	211B FE01
212C	<i>B</i> SCRIPT CAPITAL B
	212C <i>B</i> chancery style
	212C FE00 <i>B</i> roundhand style
	212C FE01
2130	<i>E</i> SCRIPT CAPITAL E
	2130 <i>E</i> chancery style
	2130 FE00 <i>E</i> roundhand style
	2130 FE01
2131	<i>F</i> SCRIPT CAPITAL F
	2131 <i>F</i> chancery style
	2131 FE00 <i>F</i> roundhand style
	2131 FE01
2133	<i>M</i> SCRIPT CAPITAL M
	2133 <i>M</i> chancery style
	2133 FE00 <i>M</i> roundhand style
	2133 FE01