C0 Controls and Basic Latin

Range: 0000–007F

This file contains an excerpt from the character code tables and list of character names for *The Unicode Standard, Version 12.1*

This file may be changed at any time without notice to reflect errata or other updates to the Unicode Standard. See [http://www.unicode.org/errata/](http://www.unicode.org/errata/) for an up-to-date list of errata.


Disclaimer

These charts are provided as the online reference to the character contents of the Unicode Standard, Version 12.1 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 12.1, online at [http://www.unicode.org/versions/Unicode12.1.0/](http://www.unicode.org/versions/Unicode12.1.0/), as well as Unicode Standard Annexes #9, #11, #14, #15, #24, #29, #31, #34, #38, #41, #42, #44, #45, and #50, the other Unicode Technical Reports and Standards, and the Unicode Character Database, which are available online.


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

Fonts

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See [http://www.unicode.org/pending/pending.html](http://www.unicode.org/pending/pending.html) and [http://www.unicode.org/alloc/Pipeline.html](http://www.unicode.org/alloc/Pipeline.html).

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C0 controls
Alias names are those for ISO/IEC 6429:1992. Commonly used alternative aliases are also shown.

0000 <control> = NULL
0001 <control> = START OF HEADING
0002 <control> = START OF TEXT
0003 <control> = END OF TEXT
0004 <control> = END OF TRANSMISSION
0005 <control> = ENQUIRY
0006 <control> = ACKNOWLEDGE
0007 <control> = BELL
0008 <control> = BACKSPACE
0009 <control> = CHARACTER TABULATION = horizontal tabulation (HT), tab
000A <control> = LINE FEED (LF) = new line (NL), end of line (EOL)
000B <control> = LINE TABULATION = vertical tabulation (VT)
000C <control> = FORM FEED (FF)
000D <control> = CARRIAGE RETURN (CR)
000E <control> = SHIFT OUT
  • known as LOCKING-SHIFT ONE in 8-bit environments
000F <control> = SHIFT IN
  • known as LOCKING-SHIFT ZERO in 8-bit environments
0010 <control> = DATA LINK ESCAPE
0011 <control> = DEVICE CONTROL ONE
0012 <control> = DEVICE CONTROL TWO
0013 <control> = DEVICE CONTROL THREE
0014 <control> = DEVICE CONTROL FOUR
0015 <control> = NEGATIVE ACKNOWLEDGE
0016 <control> = SYNCHRONOUS IDLE
0017 <control> = END OF TRANSMISSION BLOCK
0018 <control> = CANCEL
0019 <control> = END OF MEDIUM
001A <control> = SUBSTITUTE
  → FFD ◆ replacement character

001B <control> = ESCAPE
001C <control> = INFORMATION SEPARATOR FOUR = file separator (FS)
001D <control> = INFORMATION SEPARATOR THREE = group separator (GS)
001E <control> = INFORMATION SEPARATOR TWO = record separator (RS)
001F <control> = INFORMATION SEPARATOR ONE = unit separator (US)

ASCII punctuation and symbols
Based on ISO/IEC 646.

0020 SPACE
• sometimes considered a control code
  • other space characters: 2000 [ፓ] — 200A [ፒ]
  → 00A0 ◆ no-break space
  → 2008 ◆ zero width space
  → 2060 ◆ word joiner
  → 3000 ◆ ideographic space
  → FEFF ◆ zero width no-break space

0021 ! EXCLAMATION MARK
  = factorial
  = bang
  → 00A1 ¡ inverted exclamation mark
  → 01C3 ¡ latin letter retroflex click
  → 203C ¦ double exclamation mark
  → 203D ? interrobang
  → 2762 ¶ heavy exclamation mark ornament

0022 " QUOTATION MARK
• neutral (vertical), used as opening or closing quotation mark
• preferred characters in English for paired quotation marks are 201C “ & 201D ”
• 05F4 ” is preferred for gershayim when writing Hebrew
  → 02BA ” modifier letter double prime
  → 0308 ” combining double acute accent
  → 030E ” combining double vertical line above
  → 05F4 ” hebrew punctuation gershayim
  → 2033 ” double prime
  → 3003 ” ditto mark

0023 # NUMBER SIGN
  = pound sign, hash, crosshatch, octothorpe
  → 2114 # l bar symbol
  → 2317 ₱ viewdata square
  → 266F ♯ music sharp sign

0024 $ DOLLAR SIGN
  = milréis, escudo
• used for many peso currencies in Latin America and elsewhere
  • glyph may have one or two vertical bars
• other currency symbol characters start at
  → 20A0 ₪
  → 00A4 ₪ currency sign
  → 2081 ₪ peso sign
  → 1F4B2 ₪ heavy dollar sign
\texttt{0025} \texttt{ %} PERCENT SIGN
\begin{itemize}
\item \texttt{066A} \uni\% arabic percent sign
\item \texttt{2030} \uni\% per mille sign
\item \texttt{2031} \uni\‰ per ten thousand sign
\item \texttt{2052} \uni XmlNode in
\end{itemize}

\texttt{0026} \& AMPERSAND
\begin{itemize}
\item \texttt{204A} \& tonian sign et
\item \texttt{214B} \& turned ampersand
\item \texttt{1F674} \\ & heavy ampersand ornament
\end{itemize}

\texttt{0027} \texttt{ '} APOSTROPHE
\begin{itemize}
\item \texttt{0300} \uni XmlNode apostrophe-quote (1.0)
\item \texttt{0301} \uni XmlNode APL quote
\item \texttt{2013} \uni XmlNode neutral (vertical glyph with mixed usage)
\item \texttt{2019} \uni XmlNode \texttt{3} \uni XmlNode \texttt{5} is preferred for apostrophe
\item \texttt{05F3} \uni XmlNode \texttt{3} \uni XmlNode \texttt{5} is preferred for gersh when writing Hebrew
\end{itemize}

\texttt{0028} \texttt{ (} LEFT PARENTHESIS
\begin{itemize}
\item \texttt{0603} \uni XmlNode opening parenthesis (1.0)
\end{itemize}

\texttt{0029} \texttt{ )} RIGHT PARENTHESIS
\begin{itemize}
\item \texttt{0602} \uni XmlNode closing parenthesis (1.0)
\item \texttt{060C} \uni XmlNode see discussion on semantics of paired bracketing characters
\end{itemize}

\texttt{002A} \texttt{ *} ASTERISK
\begin{itemize}
\item \texttt{061E} \uni XmlNode star (on phone keypads)
\item \texttt{202A} \uni XmlNode arabic five pointed star
\item \texttt{2217} \uni XmlNode asterisk operator
\item \texttt{2689} \uni XmlNode sextile
\item \texttt{2731} \uni XmlNode heavy asterisk
\end{itemize}

\texttt{002B} \texttt{ +} PLUS SIGN
\begin{itemize}
\item \texttt{2795} \uni XmlNode heavy plus sign
\end{itemize}

\texttt{002C} \texttt{ ,} COMMA
\begin{itemize}
\item \texttt{06C0} \uni XmlNode decimal separator
\item \texttt{201A} \uni XmlNode single low-9 quotation mark
\item \texttt{2E41} \uni XmlNode reversed comma
\item \texttt{2E4C} \uni XmlNode medieval comma
\item \texttt{3001} \uni XmlNode ideographic comma
\end{itemize}

\texttt{002D} \texttt{ -} HYPHEN-MINUS
\begin{itemize}
\item \texttt{06BC} \uni XmlNode hyphen or minus sign
\item \texttt{2011} \uni XmlNode \texttt{2} \uni XmlNode \texttt{6} used for either hyphen or minus sign
\item \texttt{2010} \uni XmlNode non-breaking hyphen
\item \texttt{2012} \uni XmlNode figure dash
\item \texttt{2013} \uni XmlNode en dash
\item \texttt{2043} \uni XmlNode hyphen bullet
\item \texttt{2212} \uni XmlNode minus sign
\item \texttt{1091} \uni XmlNode roman uncia sign
\end{itemize}

\texttt{002E} \texttt{ .} FULL STOP
\begin{itemize}
\item \texttt{06D4} \uni XmlNode arabic full stop
\item \texttt{2E3C} \uni XmlNode stenographic full stop
\item \texttt{3002} \uni XmlNode ideographic full stop
\end{itemize}

\texttt{002F} \texttt{ /} SOLIDUS
\begin{itemize}
\item \texttt{06C5} \uni XmlNode slash, virgule
\item \texttt{01C0} \uni XmlNode latin letter dental click
\item \texttt{0338} \uni XmlNode combining long solidus overlay
\item \texttt{2044} \uni XmlNode fraction slash
\item \texttt{2215} \uni XmlNode division slash
\item \texttt{2E4A} \uni XmlNode dotted solidus
\end{itemize}

\texttt{ASCII digits}
\texttt{0300} \texttt{ 0} DIGIT ZERO
\begin{itemize}
\item \texttt{0300} \uni XmlNode \texttt{FE00} \texttt{0} short diagonal stroke form
\end{itemize}

\texttt{0301} \texttt{ 1} DIGIT ONE

\texttt{0302} \texttt{ 2} DIGIT TWO

\texttt{0303} \texttt{ 3} DIGIT THREE

\texttt{0304} \texttt{ 4} DIGIT FOUR

\texttt{0305} \texttt{ 5} DIGIT FIVE

\texttt{0306} \texttt{ 6} DIGIT SIX

\texttt{0307} \texttt{ 7} DIGIT SEVEN

\texttt{0308} \texttt{ 8} DIGIT EIGHT

\texttt{0309} \texttt{ 9} DIGIT NINE

\texttt{ASCII punctuation and symbols}

\texttt{032A} : COLON
\begin{itemize}
\item \texttt{0598} : armenian full stop
\item \texttt{05C3} : hebrew punctuation sof pasuq
\item \texttt{2236} : ratio
\item \texttt{A789} \uni XmlNode modifier letter colon
\end{itemize}

\texttt{032B} ; SEMICOLON
\begin{itemize}
\item this, and not \texttt{037E} ; , is the preferred character for 'Greek question mark'
\item \texttt{037E} ; , \uni XmlNode \texttt{0378} ; \texttt{0301} is preferred for 'Greek question mark'
\item \texttt{061B} ; \uni XmlNode arabic semicolon
\item \texttt{204F} ; \uni XmlNode reversed semicolon
\end{itemize}

\texttt{03C} < LESS-THAN SIGN
\begin{itemize}
\item \texttt{2329} \texttt{ <} \uni XmlNode \texttt{27E8} \texttt{<} \uni XmlNode \texttt{mathematical left angle bracket}
\item \texttt{3008} \texttt{ <} \uni XmlNode \texttt{left angle bracket}
\end{itemize}

\texttt{03D} = EQUALS SIGN
\begin{itemize}
\item \texttt{2260} \uni XmlNode \texttt{2} \uni XmlNode \texttt{5} equal to
\item \texttt{2261} \uni XmlNode \texttt{identical to}
\item \texttt{A78A} \uni XmlNode \texttt{ modifier letter short equals sign}
\item \texttt{10190} \uni XmlNode \texttt{roman sixtens sign}
\end{itemize}

\texttt{03E} > GREATER-THAN SIGN
\begin{itemize}
\item \texttt{232A} > \uni XmlNode \texttt{27E9} > \uni XmlNode \texttt{mathematical right angle bracket}
\item \texttt{3009} \texttt{ >} \uni XmlNode \texttt{right angle bracket}
\end{itemize}

\texttt{03F} ? QUESTION MARK
\begin{itemize}
\item \texttt{00BF} ? \uni XmlNode \texttt{inverted question mark}
\item \texttt{037E} ? \uni XmlNode \texttt{greek question mark}
\item \texttt{061F} ? \uni XmlNode \texttt{arabic question mark}
\item \texttt{2030} ? \uni XmlNode \texttt{interrobang}
\item \texttt{2048} ? \uni XmlNode \texttt{question exclamation mark}
\item \texttt{2049} ? \uni XmlNode \texttt{exclamation question mark}
\end{itemize}

\texttt{0400} @ COMMERCIAL AT
\begin{itemize}
\item \texttt{0040} \uni XmlNode \texttt{at sign}
\end{itemize}

\texttt{Uppercase Latin alphabet}
\texttt{0041} A LATIN CAPITAL LETTER A
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**ASCII punctuation and symbols**

- Opening square bracket (1.0)
- Other bracket characters: 27E6 ]] 27EB ]], 2993 [ ] 3008 < < 301B >

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0075 u  LATIN SMALL LETTER U
0076 v  LATIN SMALL LETTER V
0077 w  LATIN SMALL LETTER W
0078 x  LATIN SMALL LETTER X
0079 y  LATIN SMALL LETTER Y
007A z  LATIN SMALL LETTER Z
    → 0186 z  latin small letter z with stroke

ASCII punctuation and symbols
007B |  LEFT CURLY BRACKET
    = opening curly bracket (1.0)
    = left brace
007C l  VERTICAL LINE
    = vertical bar
    • used in pairs to indicate absolute value
    → 01C0 l  latin letter dental click
    → 05C0 l  hebrew punctuation paseq
    → 2223 l  divides
    → 2758 l  light vertical bar
007D }  RIGHT CURLY BRACKET
    = closing curly bracket (1.0)
    = right brace
007E ~  TILDE
    • this is a spacing character
    → 02DC ~  small tilde
    → 0303 ~  combining tilde
    → 2053 ~  swung dash
    → 223C ~  tilde operator
    → FF5E ~  fullwidth tilde

Control character
007F  <control>
    = DELETE