Miscellaneous Technical
Range: 2300–23FF

The Unicode Standard, Version 3.2
This file contains an excerpt from the character code tables and list of character names for The Unicode Standard, Version 3.2.

Characters in this chart that are new for The Unicode Standard, Version 3.2 are shown in conjunction with any existing characters. For ease of reference, the new characters have been highlighted in the chart grid and in the names list.

This file will not be updated with errata, or when additional characters are assigned to the Unicode Standard. See http://www.unicode.org/charts for access to a complete list of the latest character charts.

Disclaimer
These charts are provided as the on-line reference to the character contents of the Unicode Standard, Version 3.2, 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 3.0 (ISBN 0-201-61633-5), as well as Unicode Standard Annexes #28 and #27, the other Unicode Technical Reports and the Unicode Character Database, which are available on-line.

See http://www.unicode.org/Public/UNIDATA/UnicodeCharacterDatabase.html and http://www.unicode.org/unicode/reports

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

Fonts
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The information in this file may be updated from time to time. The Unicode Consortium is not liable for errors or omissions in this excerpt file or the standard itself. Information on characters added to the Unicode Standard since the publication of Version 3.2 as well as on characters currently being considered for addition to the Unicode Standard can be found on the Unicode web site.


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<table>
<thead>
<tr>
<th>Code</th>
<th>Unicode Block</th>
</tr>
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<tbody>
<tr>
<td>0</td>
<td>Miscellaneous Technical</td>
</tr>
<tr>
<td>1</td>
<td>Miscellaneous Technical</td>
</tr>
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<td>2</td>
<td>Miscellaneous Technical</td>
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<tr>
<td>3</td>
<td>Miscellaneous Technical</td>
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<td>4</td>
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<td>Miscellaneous Technical</td>
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<tr>
<td>9</td>
<td>Miscellaneous Technical</td>
</tr>
<tr>
<td>A</td>
<td>Miscellaneous Technical</td>
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<tr>
<td>B</td>
<td>Miscellaneous Technical</td>
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<tr>
<td>C</td>
<td>Miscellaneous Technical</td>
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<tr>
<td>D</td>
<td>Miscellaneous Technical</td>
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<td>E</td>
<td>Miscellaneous Technical</td>
</tr>
<tr>
<td>F</td>
<td>Miscellaneous Technical</td>
</tr>
<tr>
<td>Unicode Codepoints</td>
<td>Description</td>
</tr>
<tr>
<td>---------------------</td>
<td>-------------</td>
</tr>
<tr>
<td>2380 - 238F</td>
<td>Miscellaneous Technical</td>
</tr>
</tbody>
</table>

- **00**
  - 2380: ꘀ
  - 2381: ꘁ
  - 2382: ꘂ
  - 2383: ꘃ
  - 2384: ꘄ
  - 2385: ꘅ
  - 2386: ꘆ
  - 2387: ꘇ
  - 2388: ꘈ
  - 2389: ꘉ
  - 238A: ꘊ
  - 238B: ꘋ
  - 238C: ꘌ
  - 238D: ꘍
  - 238E: ꘎
  - 238F: ꘏
**Miscellaneous technical**

<table>
<thead>
<tr>
<th>Code</th>
<th>Symbol</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2300</td>
<td>⌀</td>
<td>DIAMETER SIGN</td>
<td>➔ 2205 Ø empty set</td>
</tr>
<tr>
<td>2308</td>
<td>⬇️</td>
<td>LEFT CEILING</td>
<td>= APL upstile</td>
</tr>
<tr>
<td>2309</td>
<td>⬆️</td>
<td>RIGHT CEILING</td>
<td>➔ 20E7 ▼ combining annuity symbol</td>
</tr>
<tr>
<td>2310</td>
<td>⬇️</td>
<td>BOTTOM RIGHT CROP</td>
<td>➔ set of four “crop” corners, arranged facing outward</td>
</tr>
<tr>
<td>2311</td>
<td>⬆️</td>
<td>SQUARE LOZENGE</td>
<td>➔ Kissen (pillow)</td>
</tr>
<tr>
<td>2312</td>
<td>⬅️</td>
<td>ARC</td>
<td>➔ 25E0 ← upper half circle</td>
</tr>
<tr>
<td>2313</td>
<td>⬇️</td>
<td>SEGMENT</td>
<td></td>
</tr>
<tr>
<td>2314</td>
<td>⬆️</td>
<td>SECTOR</td>
<td></td>
</tr>
<tr>
<td>2315</td>
<td>⬇️</td>
<td>TELEPHONE RECORDER</td>
<td></td>
</tr>
<tr>
<td>2316</td>
<td>⬆️</td>
<td>POSITION INDICATOR</td>
<td></td>
</tr>
<tr>
<td>2317</td>
<td>⬇️</td>
<td>VIEWDATA SQUARE</td>
<td>➔ 2205 + equal and parallel to</td>
</tr>
<tr>
<td>2318</td>
<td>⬆️</td>
<td>PLACE OF INTEREST SIGN</td>
<td>➔ COMMAND KEY</td>
</tr>
<tr>
<td>2319</td>
<td>⬇️</td>
<td>TURNED NOT SIGN</td>
<td>➔ line marker</td>
</tr>
<tr>
<td>2320</td>
<td>⬇️</td>
<td>TOP HALF INTEGRAL</td>
<td></td>
</tr>
<tr>
<td>2321</td>
<td>⬆️</td>
<td>TOP LEFT CORNER</td>
<td>➔ set of four “quine” corners, for quincuncial arrangement</td>
</tr>
<tr>
<td>2322</td>
<td>⬇️</td>
<td>TOP RIGHT CORNER</td>
<td></td>
</tr>
<tr>
<td>2323</td>
<td>⬆️</td>
<td>BOTTOM LEFT CORNER</td>
<td></td>
</tr>
<tr>
<td>2324</td>
<td>⬇️</td>
<td>BOTTOM RIGHT CORNER</td>
<td></td>
</tr>
<tr>
<td>2325</td>
<td>⬇️</td>
<td>HOURGLASS</td>
<td>➔ 2040 ▼ character tie</td>
</tr>
<tr>
<td>2326</td>
<td>⬆️</td>
<td>TOP LEFT CORNER</td>
<td></td>
</tr>
<tr>
<td>2327</td>
<td>⬆️</td>
<td>TOP HALF INTEGRAL</td>
<td></td>
</tr>
<tr>
<td>2328</td>
<td>⬆️</td>
<td>PERSPECTIVE</td>
<td></td>
</tr>
<tr>
<td>2329</td>
<td>⬆️</td>
<td>LEFT-POINTING ANGLE BRACKET</td>
<td>➔ discouraged for mathematical use because of canonical equivalence to CJK punctuation</td>
</tr>
<tr>
<td>2330</td>
<td>⬇️</td>
<td>RIGHT-POINTING ANGLE BRACKET</td>
<td>➔ discouraged for mathematical use because of canonical equivalence to CJK punctuation</td>
</tr>
</tbody>
</table>

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**APL**

<table>
<thead>
<tr>
<th>Code</th>
<th>Symbol</th>
<th>Name</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>2335</td>
<td>⬇️</td>
<td>COUNTERSINK</td>
<td>➔ 2304 ▼ down arrowhead</td>
</tr>
<tr>
<td>2336</td>
<td>⬆️</td>
<td>APL FUNCTIONAL SYMBOL I-BEAM</td>
<td></td>
</tr>
</tbody>
</table>

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The Unicode Standard 3.2, Copyright © 1991-2002, Unicode, Inc. All rights reserved.
2337  APL FUNCTIONAL SYMBOL QUAD SQUISH
       → 2395 ▦ apl functional symbol quad
       → 25AF ☃ white vertical rectangle
2338  APL FUNCTIONAL SYMBOL QUAD EQUAL
2339  APL FUNCTIONAL SYMBOL QUAD DIVIDE
233A  APL FUNCTIONAL SYMBOL QUAD DIAMOND
233B  APL FUNCTIONAL SYMBOL QUAD JOT
233C  APL FUNCTIONAL SYMBOL QUAD CIRCLE
233D  APL FUNCTIONAL SYMBOL CIRCLE STILE
233E  APL FUNCTIONAL SYMBOL CIRCLE JOT
       → 229A ◇ circled ring operator
233F  ⊓ APL FUNCTIONAL SYMBOL SLASH BAR
2340  ⊒ APL FUNCTIONAL SYMBOL BACKSLASH BAR
2341  ⊐ APL FUNCTIONAL SYMBOL QUAD SLASH
2342  ⊐ APL FUNCTIONAL SYMBOL QUAD BACKSLASH
2343  ⊐ APL FUNCTIONAL SYMBOL QUAD LESS-THE
2344  ⊐ APL FUNCTIONAL SYMBOL QUAD GREATER-THE
2345  ⊓ APL FUNCTIONAL SYMBOL LEFTWARDS VANE
2346  ⊓ APL FUNCTIONAL SYMBOL RIGHTWARDS VANE
2347  ⊐ APL FUNCTIONAL SYMBOL QUAD LEFTWARDS ARROW
2348  ⊐ APL FUNCTIONAL SYMBOL QUAD RIGHTWARDS ARROW
2349  ⊐ APL FUNCTIONAL SYMBOL CIRCLE BACKSLASH
234A  ⊎ APL FUNCTIONAL SYMBOL DOWN TACK UNDERBAR
       = up tack underbar
       * preferred naming for APL tack symbols
       now follows the London Convention in
       ISO/IEC 13751:2000 (APL Extended)
       → 22A5 ⊎ up tack
234B  ⊎ APL FUNCTIONAL SYMBOL DELTA STILE
234C  ⊐ APL FUNCTIONAL SYMBOL QUAD CARET
234D  ⊐ APL FUNCTIONAL SYMBOL QUAD DELTA
234E  ⊍ APL FUNCTIONAL SYMBOL DOWN TACK JOT
       = up tack jot
       → 22A5 ⊍ up tack
234F  ⊍ APL FUNCTIONAL SYMBOL UPWARDS VANE
2350  ⊌ APL FUNCTIONAL SYMBOL QUAD UPWARDS ARROW
2351  ⊎ APL FUNCTIONAL SYMBOL UP TACK OVERBAR
       = down tack overbar
       → 22A4 ⊎ down tack
       → 3012 ⊎ postal mark
2352  ⊌ APL FUNCTIONAL SYMBOL DEL STILE
2353  ⊌ APL FUNCTIONAL SYMBOL QUAD UP CARET
2354  ⊌ APL FUNCTIONAL SYMBOL QUAD DEL
2355  ⊎ APL FUNCTIONAL SYMBOL UP TACK JOT
       = down tack jot
       → 22A4 ⊎ down tack
2356  ⊎ APL FUNCTIONAL SYMBOL DOWNWARDS VANE
2357  ⊍ APL FUNCTIONAL SYMBOL DOWNWARDS ARROW
2358  ' APL FUNCTIONAL SYMBOL QUOTE UNDERBAR
2359  Δ APL FUNCTIONAL SYMBOL DELTA UNDERBAR
235A  ◇ APL FUNCTIONAL SYMBOL DIAMOND UNDERBAR
235B  ◇ APL FUNCTIONAL SYMBOL JOT UNDERBAR
235C  ◇ APL FUNCTIONAL SYMBOL CIRCLE UNDERBAR
235D  ◇ APL FUNCTIONAL SYMBOL UP SHOE JOT
235E  ◇ APL FUNCTIONAL SYMBOL QUOTE QUAD
235F  ◇ APL FUNCTIONAL SYMBOL QUAD COLON
2360  ◇ APL FUNCTIONAL SYMBOL CIRCLE STAR
2361  ⊎ APL FUNCTIONAL SYMBOL UP TACK DIAERESIS
       = down tack diaeresis
       → 22A4 ⊎ down tack
2362  ✓ APL FUNCTIONAL SYMBOL DEL DIAERESIS
2363  * APL FUNCTIONAL SYMBOL STAR DIAERESIS
2364  * APL FUNCTIONAL SYMBOL JOT DIAERESIS
       = hoot
2365  ◇ APL FUNCTIONAL SYMBOL CIRCLE DIAERESIS
       = holler
2366  ◆ APL FUNCTIONAL SYMBOL DOWN SHOE STILE
2367  ◆ APL FUNCTIONAL SYMBOL LEFT SHOE STILE
The Unicode Standard 3.2, Copyright © 1991-2002, Unicode, Inc. All rights reserved.
23A5 | RIGHT SQUARE BRACKET EXTENSION
23A6 | RIGHT SQUARE BRACKET LOWER CORNER
23A7 | LEFT CURLY BRACKET UPPER HOOK
23A8 | LEFT CURLY BRACKET MIDDLE PIECE
23A9 | LEFT CURLY BRACKET LOWER HOOK
23AA | CURLY BRACKET EXTENSION
23AB | RIGHT CURLY BRACKET UPPER HOOK
23AC | RIGHT CURLY BRACKET MIDDLE PIECE
23AD | RIGHT CURLY BRACKET LOWER HOOK

**Special character extensions**
23AE | INTEGRAL EXTENSION
   → 2320 \( \int \) top half integral
   → 2321 \( \int \) bottom half integral
23AF | HORIZONTAL LINE EXTENSION
   • used for extension of arrows

**Bracket pieces**
23B0 | UPPER LEFT OR LOWER RIGHT CURLY BRACKET SECTION
   = left moustache
23B1 | UPPER RIGHT OR LOWER LEFT CURLY BRACKET SECTION
   = right moustache

**Summation sign parts**
23B2 + \( \sum \) SUMMATION TOP
23B3 \( \sum \) SUMMATION BOTTOM

**Vertical brackets**
23B4 \( \lceil \) TOP SQUARE BRACKET
23B5 \( \lfloor \) BOTTOM SQUARE BRACKET
23B6 \( \overline{\int} \) BOTTOM SQUARE BRACKET OVER TOP SQUARE BRACKET

**Terminal graphic characters**
23B7 \( \sqrt{\) RADICAL SYMBOL BOTTOM
23B8 \( \left\_ \) LEFT VERTICAL BOX LINE
23B9 \( \right\_ \) RIGHT VERTICAL BOX LINE

**Scan lines for terminal graphics**
The scan line numbers here refer to old, low-resolution technology for terminals, with only 9 scan lines per fixed-size character glyph. Even-numbered scan lines are unified with box-drawing graphics.
23BA \( \) HORIZONTAL SCAN LINE-1
23BB \( \) HORIZONTAL SCAN LINE-3
23BC \( \) HORIZONTAL SCAN LINE-7
23BD \( \) HORIZONTAL SCAN LINE-9

**Dentistry notation symbols**
23BE \( \) DENTISTRY SYMBOL LIGHT VERTICAL AND TOP RIGHT