

Table of Contents

<i>Foreword</i>	xiii
<i>Preface</i>	xv
1. CJKV Information Processing Overview	1
Multiple Writing Systems	2
Character Set Standards	6
Encoding Methods	8
Input Methods	11
Typography	13
Basic Concepts and Terminology	14
2. Writing Systems	27
Latin Characters and Transliteration	27
Zhuyin	40
Kana	42
Hangul	47
Chinese Characters	50
Non-Chinese Chinese Characters	61
3. Character Set Standards	66
Non-Coded Character Set Standards	67
Coded Character Set Standards	71
International Character Set Standards	120

Character Set Standard Oddities	130
Non-Coded Versus Coded Character Sets	132
Information Interchange Versus Professional Publishing	134
Advice to Developers	136
4. Encoding Methods	138
Locale-Independent Encoding Methods	140
Locale-Specific Encoding Methods	169
Comparing CJKV Encoding Methods	185
International Encoding Methods	186
Charset Designations	196
Code Pages	199
Code Conversion	202
Repairing Unreadable CJKV Text	209
Beware of Little and Big Endian Issues	214
Advice to Developers	214
5. Input Methods	216
Transliteration Techniques	217
Input Techniques	224
User Interface Concerns	237
Keyboard Arrays	238
Other Input Hardware	260
Input Method Software	262
6. Font Formats	269
Typeface Design Issues	270
Bitmapped Fonts	271
Outline Fonts	276
Ruby Fonts	308
Host-Based Versus Printer-Resident Fonts	309
Creating Your Own Fonts	321
External Character Handling	325
Advice to Developers	335
7. Typography	336
Rules, Rules, Rules...	337
Typographic Units and Measurements	338
Horizontal and Vertical Layout	342
Line Breaking and Word Wrapping	352

Character Spanning	356
Alternate Metrics	357
Kerning	363
Line Length Issues	365
Multilingual Text	366
Glyph Substitution	370
Annotations	372
Typographic Software	377
8. Output Methods	387
Where Can Fonts Live?	388
Printer Output	389
PostScript CJKV Printers	389
Computer Monitor Output	394
Other Printing Methods	398
The Role of Printer Drivers	399
Output Tips and Tricks	402
Advice to Developers	404
9. Information Processing Techniques	406
Language, Country, and Script Codes	407
Programming Languages	410
Code Conversion Algorithms	414
Java Programming Examples	422
Miscellaneous Algorithms	426
Byte Versus Character Handling	433
Character Sorting	440
Natural Language Processing	443
Regular Expressions	445
Search Engines	447
Code Processing Tools	448
10. Operating Systems, Text Editors, and Word Processors	455
Viewing CJKV Text on Non-CJKV Systems	456
Operating Systems	457
Hybrid Environments	468
Text Editors	472
Word Processors	479
Dedicated Word Processors	482

11. Dictionaries and Dictionary Software	484
Chinese Character Dictionary Indexes	484
Character Dictionaries	491
Other Useful Dictionaries	497
Dictionary Hardware	498
Dictionary Software	499
Machine Translation Software	507
Machine Translation Services	508
Learning Aids	509
12. The Internet	511
Email	512
News	517
FTP and Telnet	518
Network Domains	520
Getting Connected	522
Internet Software	523
13. The World Wide Web	530
Content Versus Presentation	530
Displaying Web Documents	533
Authoring HTML Documents	534
Authoring XML Documents	538
Authoring PDF Documents	539
Character References	541
CGI Programming Examples	542
Shall We Surf?	545
A. Code Conversion Tables	547
B. Notation Conversion Table	551
C. Vendor Character Set Standards	554
D. Vendor Encoding Methods	605
E. GB 2312-80 Table	638
F. GB/T 12345-90 Table	653
G. CNS 11643-1992 Table	668

<i>H. Big Five Table</i>	773
<i>I. Hong Kong GCCS Table</i>	804
<i>J. JIS X 0208:1997 Table</i>	814
<i>K. JIS X 0212-1990 Table</i>	828
<i>L. KS X 1001:1992 Table</i>	840
<i>M. KS X 1002:1991 Hanja Table</i>	856
<i>N. Hangul Reading Table</i>	862
<i>O. TCVN 6056:1995 Table</i>	876
<i>P. Code Table Indexes</i>	883
<i>Q. Character Lists and Mapping Tables</i>	897
<i>R. Chinese Character Lists</i>	941
<i>S. Single-Byte Code Tables</i>	965
<i>T. Software and Document Sources</i>	975
<i>U. Mailing Lists</i>	995
<i>V. Professional Organizations</i>	1006
<i>W. Perl Code Examples</i>	1008
<i>X. Glossary</i>	1025
<i>Bibliography</i>	1053
<i>Index</i>	1073