

TECHNICAL REPORT

ISO/TR
11548-2

First edition
2001-12-15

Communication aids for blind persons — Identifiers, names and assignation to coded character sets for 8-dot Braille characters —

Part 2: Latin alphabet based character sets

*Aides à la communication pour personnes aveugles — Identificateurs,
noms et attribution aux jeux de caractères codés pour caractères Braille
à 8 points —*

Partie 2: Jeux de caractères basés sur l'alphabet latin



Reference number
ISO/TR 11548-2:2001(E)

© ISO 2001

PDF disclaimer

This PDF file may contain embedded typefaces. In accordance with Adobe's licensing policy, this file may be printed or viewed but shall not be edited unless the typefaces which are embedded are licensed to and installed on the computer performing the editing. In downloading this file, parties accept therein the responsibility of not infringing Adobe's licensing policy. The ISO Central Secretariat accepts no liability in this area.

Adobe is a trademark of Adobe Systems Incorporated.

Details of the software products used to create this PDF file can be found in the General Info relative to the file; the PDF-creation parameters were optimized for printing. Every care has been taken to ensure that the file is suitable for use by ISO member bodies. In the unlikely event that a problem relating to it is found, please inform the Central Secretariat at the address given below.

© ISO 2001

All rights reserved. Unless otherwise specified, no part of this publication may be reproduced or utilized in any form or by any means, electronic or mechanical, including photocopying and microfilm, without permission in writing from either ISO at the address below or ISO's member body in the country of the requester.

ISO copyright office
Case postale 56 • CH-1211 Geneva 20
Tel. + 41 22 749 01 11
Fax + 41 22 749 09 47
E-mail copyright@iso.ch
Web www.iso.ch

Printed in Switzerland

Contents

	Page
Foreword	iv
Introduction	v
1 Scope	1
2 Terms and definitions	1
3 Shifting to Latin alphabet based character sets	1
4 Semantic assignation to Braille patterns	1
4.1 General	1
4.2 Tables 1 and 2	1
4.3 Table 3	2
4.4 Tables A.1 and A.2	2
5 Tables 1 and 2: Braille patterns and their meanings	2
6 Table 3: Braille patterns — Code tables	37
Annex A Braille patterns — Code tables PC1 (850) and PC2 (437)	39
Bibliography	42

Foreword

ISO (the International Organization for Standardization) is a worldwide federation of national standards bodies (ISO member bodies). The work of preparing International Standards is normally carried out through ISO technical committees. Each member body interested in a subject for which a technical committee has been established has the right to be represented on that committee. International organizations, governmental and non-governmental, in liaison with ISO, also take part in the work. ISO collaborates closely with the International Electrotechnical Commission (IEC) on all matters of electrotechnical standardization.

International Standards are drafted in accordance with the rules given in the ISO/IEC Directives, Part 3.

The main task of technical committees is to prepare International Standards. Draft International Standards adopted by the technical committees are circulated to the member bodies for voting. Publication as an International Standard requires approval by at least 75 % of the member bodies casting a vote.

In exceptional circumstances, when a technical committee has collected data of a different kind from that which is normally published as an International Standard ("state of the art", for example), it may decide by a simple majority vote of its participating members to publish a Technical Report. A Technical Report is entirely informative in nature and does not have to be reviewed until the data it provides are considered to be no longer valid or useful.

Attention is drawn to the possibility that some of the elements of this part of ISO/TR 11548 may be the subject of patent rights. ISO shall not be held responsible for identifying any or all such patent rights.

ISO/TR 11548-2 was prepared by Technical Committee ISO/TC 173, *Technical systems and aids for disabled or handicapped persons*.

ISO/TR 11548 consists of the following parts, under the general title *Communication aids for blind persons — Identifiers, names and assignation to coded character sets for 8-dot Braille characters*:

- *Part 1: General guidelines for Braille identifiers and shift marks*
- *Part 2: Latin alphabet based character sets*

Further parts may be developed to meet the needs of other languages, such as Arabic, Chinese, Japanese, etc.

Introduction

The objective of this Technical Report is, in addition to ISO/IEC 10646-1:2000 which encodes 8-dot Braille patterns, to assign semantics to 8-dot Braille patterns via mapping to other coded character sets. Their coding with the 8-bit code is determined in order to set guidelines for the manufacturing of compatible input and output equipment using the Braille system. This enables visually-impaired persons to interpret the output of data processing equipment and facilitates communication with sighted people.

This Technical Report is neither intended to create a new code nor to alter or modify existing 6-dot Braille systems.

As there are many different character sets used worldwide (e.g. Arabic, Chinese, Japanese, Latin) a corresponding number of reference tables is necessary. The standardization work started with defining general guidelines for Braille identifiers and shift marks as well as in creating the reference for Latin alphabet based character sets; further expansion to other character sets is encouraged.

Communication aids for blind persons — Identifiers, names and assignation to coded character sets for 8-dot Braille characters —

Part 2: Latin alphabet based character sets

1 Scope

This part of ISO/TR 11548 specifies the assignation of 8-dot Braille to Latin alphabet based 8-bit code tables.

This part of ISO/TR 11548 is intended to be used by experts and manufacturers of 8-dot Braille input and output devices, interfaces and software for data exchange.

This part of ISO/TR 11548 does not apply to 6-dot Braille and does not specify any physical dimension of Braille characters.

2 Terms and definitions

For the purposes of this part of ISO/TR 11548, the definitions given in ISO/IEC 10367 and ISO/TR 11548-1 apply.

3 Shifting to Latin alphabet based character sets

To indicate that the following Braille characters are representing characters of Latin alphabet based code tables of this part of ISO 11548, SHIFT MARK ONE or SHIFT MARK TWO followed by the character set indicator B100 has to be used. For details see clauses 4 and 5 of ISO/TR 11548-1:2001.

4 Semantic assignation to Braille patterns

4.1 General

In this Technical Report assignation of semantics to 8-dot Braille patterns is done by mapping to Latin-based character sets and is described in 5 tables. In Tables 1 and 2 different meanings of the same Braille pattern are distinguished by rank numbers as given in column "rank". (Synonymous and quasisynonymous names do not establish different ranks.) The primary (default) meaning is indicated by rank number "0".

To indicate the meaning unambiguously a shift mark in combination with a rank indicator is used, as described in ISO/TR 11548-1. In the following tables, for SHIFT MARK ONE to SHIFT MARK THREE their acronyms SM1 to SM3 are used.

NOTE Deviating meanings of Braille characters in 6-dot Braille, in Braille shorthand (abbreviations, contractions), in Braille musical notation, in international Braille phonetic notation or in mathematical notations, etc. have not been listed.

4.2 Tables 1 and 2

Table 1 describes the assignation of Braille patterns to different meanings in different Latin alphabet based code tables sorted by Braille identifiers. Table 2 serves the same purpose but is sorted according to the meaning of the Latin alphabet based characters.

4.3 Table 3

The coding of the 8-dot Braille characters for communication and data processing purposes follows as closely as possible the coding of the Latin alphabet No. 1 as set forth in ISO/IEC 8859-1. Table 3 contains the complete Braille equivalent to this Technical Report. The control characters, in accordance with ISO/IEC 646, ISO/IEC 6429, ISO/IEC 4873 (especially to be used with ISO/IEC 10367) and ISO/IEC 10646-1 have also been added in order to present a complete set of all 256 8-dot Braille characters. This code table is referenced in the column "Code table" of Tables 1 and 2 by its corresponding number "3".

4.4 Tables A.1 and A.2

Taking into account the existing conventions and availability of technical equipment it is convenient to additionally assign the Braille patterns to two 8-bit code tables which are in common use on personal computers. In the following, these will be referred to as code tables PC1 (Table A.1) and PC2 (Table A.2).

NOTE The first of these is also known as code table No. 850 and the second one as code table No. 437. However, these are not designations standardized by ISO.

In the column "Code table" of Tables 1 and 2, these two PC-code tables (A.1 and A.2) are designated by the numbers "4" and "5", respectively.

5 Tables 1 and 2: Braille patterns and their meanings

Table 1 describes the assignation of Braille patterns to different meanings in different Latin alphabet based code tables sorted by Braille identifiers. Table 2 serves the same purpose but is sorted according to the meaning of the Latin alphabet based characters.

Table 1 — 8-dot Braille characters, arranged according to their identifiers

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B000	○○ ○○○ ○○○○	-	SP01	SP	0	SPACE		3, 4, 5	032	20
B001	●○ ○○○ ○○○○	1	LA01	a	0	LATIN SMALL LETTER A		3, 4, 5	097	61
B002	○○ ●●○ ○○○○	2	SP08	,	0	COMMA		3, 4, 5	044	2C
B003	●●○ ○○○ ○○○○	12	LB01	b	0	LATIN SMALL LETTER B		3, 4, 5	098	62
B004	○○ ○○● ○○○○	3	SP11	.	0	FULL STOP		3, 4, 5	046	2E
B005	●○ ○●○ ○○○○	13	LK01	k	0	LATIN SMALL LETTER K		3, 4, 5	107	6B
B006	○○ ●●○ ○○○○	23	SP14	;	0	SEMICOLON		3, 4, 5	059	3B
B007	●○ ●●○ ○○○○	123	LL01	l	0	LATIN SMALL LETTER L		3, 4, 5	108	6C
B010	○● ○○○ ○○○○	4	SP04	"	0	QUOTATION MARK		3, 4, 5	034	22
B011	●● ○○○ ○○○○	14	LC01	c	0	LATIN SMALL LETTER C		3, 4, 5	099	63
B012	○● ●●○ ○○○○	24	LI01	i	0	LATIN SMALL LETTER I		3, 4, 5	105	69
B013	●● ○○○ ○○○○	124	LF01	f	0	LATIN SMALL LETTER F		3, 4, 5	102	66
B014	○● ○○● ○○○○	34	SM13	|	0	VERTICAL LINE		3, 4, 5	124	7C
B015	●● ○○○ ○○○○	134	LM01	m	0	LATIN SMALL LETTER M		3, 4, 5	109	6D
B016	○● ○●○ ○○○○	234	LS01	s	0	LATIN SMALL LETTER S		3, 4, 5	115	73
B017	●● ●●○ ○○○○	1234	LP01	p	0	LATIN SMALL LETTER P		3, 4, 5	112	70
B020	○○ ○○● ○○○○	5	SP02	!	0	EXCLAMATION MARK		3, 4, 5	033	21
B021	●○ ●●○ ○○○○	15	LE01	e	0	LATIN SMALL LETTER E		3, 4, 5	101	65
B022	○○ ●●○ ○○○○	25	SP13	:	0	COLON		3, 4, 5	058	3A
B023	●○ ●●○ ○○○○	125	LH01	h	0	LATIN SMALL LETTER H		3, 4, 5	104	68
B024	○○ ●●○ ○○○○	35	SM04	*	0	ASTERISK		3, 4, 5	042	2A
B025	●○ ●●○ ○○○○	135	LO01	o	0	LATIN SMALL LETTER O		3, 4, 5	111	6F

Table 1 (continued)

Braille character		Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B026	○○ ●● ○○	235	SA01	+	0	PLUS SIGN	3, 4, 5	043	2B
B027	●○ ●● ○○	1235	LR01	r	0	LATIN SMALL LETTER R	3, 4, 5	114	72
B030	○● ○○ ○○	45	SA05	>	0	GREATER-THAN SIGN	3, 4, 5	062	3E
B031	●● ○○ ○○	145	LD01	d	0	LATIN SMALL LETTER D	3, 4, 5	100	64
B032	○● ○○ ○○	245	LJ01	j	0	LATIN SMALL LETTER J	3, 4, 5	106	6A
B033	●● ○○ ○○	1245	LG01	g	0	LATIN SMALL LETTER G	3, 4, 5	103	67
B034	○● ○○ ○○	345	SD13	'	0	GRAVE ACCENT	3, 4, 5	096	60
B035	●● ○○ ○○	1345	LN01	n	0	LATIN SMALL LETTER N	3, 4, 5	110	6E
B036	○● ○○ ○○	2345	LT01	t	0	LATIN SMALL LETTER T	3, 4, 5	116	74
B037	●● ○○ ○○	12345	LQ01	q	0	LATIN SMALL LETTER Q	3, 4, 5	113	71
B040	○○ ○○● ○○	6	SP05	'	0	APOSTROPHE	3, 4, 5	039	27
B041	●○ ○○ ○○	16	ND01	1	0	DIGIT ONE	3, 4, 5	049	31
B042	○○ ○○ ○○	26	SP15	?	0	QUESTION MARK	3, 4, 5	063	3F
B043	●○ ○○ ○○	126	ND02	2	0	DIGIT TWO	3, 4, 5	050	32
B044	○○ ○○● ○○	36	SP10	-	0 1	HYPHEN MINUS SIGN	3, 4, 5	045	2D
B045	●○ ○○ ○○	136	LU01	u	0	LATIN SMALL LETTER U	3, 4, 5	117	75
B046	○○ ○○● ○○	236	SP06	(	0	LEFT PARENTHESIS	3, 4, 5	040	28
B047	●○ ○○ ○○	1236	LV01	v	0	LATIN SMALL LETTER V	3, 4, 5	118	76
B050	○○ ○○● ○○	46	SC03	\$	0	DOLLAR SIGN	3, 4, 5	036	24
B051	●○ ○○ ○○	146	ND03	3	0	DIGIT THREE	3, 4, 5	051	33
B052	○○ ○○● ○○	246	ND09	9	0	DIGIT NINE	3, 4, 5	057	39

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or ac- ronym	Rank	Name		Code table	Dez.	Hex
B053	••○ ○○○ ○○○	1246	ND06	6	0	DIGIT SIX		3, 4, 5	054	36
B054	○○○ ○○○ ○○○	346	ND10	0	0	DIGIT ZERO		3, 4, 5	048	30
B055	••○ ○○○ ○○○	1346	LX01	x	0	LATIN SMALL LETTER X		3, 4, 5	120	78
B056	○○○ ○○○ ○○○	2346	SD19	~	0	TILDE		3, 4, 5	126	7E
B057	••○ ○○○ ○○○	12346	SM03	&	0	AMPERSAND		3, 4, 5	038	26
B060	○○○ ○○○ ○○○	56	SA03	<	0	LESS-THAN SIGN		3, 4, 5	060	3C
B061	•○○ ○○○ ○○○	156	ND05	5	0	DIGIT FIVE		3, 4, 5	053	35
B062	○○○ ○○○ ○○○	256	SP12	/	0	SOLIDUS; SLASH		3, 4, 5	047	2F
B063	•○○ ○○○ ○○○	1256	ND08	8	0	DIGIT EIGHT		3, 4, 5	056	38
B064	○○○ ○○○ ○○○	356	SP07	)	0	RIGHT PARANTHESIS		3, 4, 5	041	29
B065	•○○ ○○○ ○○○	1356	LZ01	z	0	LATIN SMALL LETTER Z		3, 4, 5	122	7A
B066	○○○ ○○○ ○○○	2356	SA04	=	0	EQUALS SIGN		3, 4, 5	061	3D
B067	•○○ ○○○ ○○○	12356	SM11	{	0	LEFT CURLY BRACKET		3, 4, 5	123	7B
B070	○○○ ○○○ ○○○	456	SM79	△	0	HOUSE SYMBOL		4, 5	127	7F
B071	•○○ ○○○ ○○○	1456	ND04	4	0	DIGIT FOUR		3, 4, 5	052	34
B072	○○○ ○○○ ○○○	2456	LW01	w	0	LATIN SMALL LETTER W		3, 4, 5	119	77
B073	•○○ ○○○ ○○○	12456	ND07	7	0	DIGIT SEVEN		3, 5, 6	055	37
B074	○○○ ○○○ ○○○	3456	SM01	#	0	NUMBER SIGN		3, 4, 5	035	23
B075	•○○ ○○○ ○○○	13456	LY01	y	0	LATIN SMALL LETTER Y		3, 4, 5	121	79
B076	○○○ ○○○ ○○○	23456	SM14	}	0	RIGHT CURLY BRACKET		3, 4, 5	125	7D

Table 1 (continued)

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B122	○○ ●● ○○ ●●	257	SF01	Γ	0	BOX DRAWINGS LIGHT DOWN AND RIGHT		4, 5	218	DA
B123	●○ ●● ○○ ●○	1257	LH02	H	0	LATIN CAPITAL LETTER H		3, 4, 5	072	48
B124	○○ ●● ○○ ●○	357	SM24	§	0	SECTION SIGN; PARAGRAPH SIGN		3 4	167 245	A7 F5
			SA93	Σ	1	SUMMATION SIGN		5	228	E4
			GS02	Σ	2	GREEK CAPITAL LETTER SIGMA		5	228	E4
B125	●○ ●● ○○ ●○	1357	LO02	O	0	LATIN CAPITAL LETTER O		3, 4, 5	079	4F
B126	○○ ●● ○○ ●○	2357	LT64	þ	0	LATIN CAPITAL LETTER THORN (icelandic)		3 4	222 232	DE E8
			SC06	₱	1	PESETA SIGN		5	158	9E
B127	●○ ●● ○○ ●○	12357	LR02	R	0	LATIN CAPITAL LETTER R		3, 4, 5	082	52
B130	○○ ●● ○○ ●○	457	SF23	⊣	0	BOX DRAWINGS HEAVY VERTICAL AND LEFT		4, 5	185	B9
B131	●○ ●● ○○ ●○	1457	LD02	D	0	LATIN CAPITAL LETTER D		3, 4, 5	068	44
B132	○○ ●● ○○ ●○	2457	LJ02	J	0	LATIN CAPITAL LETTER J		3, 4, 5	074	4A
B133	●○ ●● ○○ ●○	12457	LG02	G	0	LATIN CAPITAL LETTER G		3, 4, 5	071	47
B134	○○ ●● ○○ ●○	3457	SM05	@	0	COMMERCIAL AT		3, 4, 5	064	40
B135	●○ ●● ○○ ●○	13457	LN02	N	0	LATIN CAPITAL LETTER N		3, 4, 5	078	4E
B136	○○ ●● ○○ ●○	23457	LT02	T	0	LATIN CAPITAL LETTER T		3, 4, 5	084	54
B137	●○ ●● ○○ ●○	123457	LQ02	Q	0	LATIN CAPITAL LETTER Q		3, 4, 5	081	51
B140	○○ ●● ○○ ●○	67	SM12	—	0	LONG HORIZONTAL LINE (connects on left and right)		4, 5	196	C4
			SF10	—	1	BOX DRAWINGS LIGHT HORIZONTAL		4, 5	196	C4
B141	●○ ○○ ●○ ●○	167	LA16	Â	0	LATIN CAPITAL LETTER A WITH CIRCUMFLEX		3 4	194 182	C2 B6
			SF45	⊣	1	BOX DRAWINGS DOWN LIGHT AND HORIZONTAL HEAVY		5	207	CF

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)				8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B142	○○ ●● ○○ ●●	267	LO20	Ó	0	LATIN CAPITAL LETTER O WITH TILDE	3 4	213 229	D5 E5
			SF37	━	1	BOX DRAWINGS VERTICAL HEAVY AND RIGHT LIGHT	5	199	C7
B143	●○ ○● ●○ ○●	1267	LE16	Ê	0	LATIN CAPITAL LETTER E WITH CIRCUMFLEX	3 4	202 210	CA D2
			SS26	∫	1	BIG INTEGRAL SIGN UPPER HALF	5	244	F4
B144	○○ ○○ ●●	367	SP03	i	0	INVERTED EXCLAMATION MARK	3 4, 5	161 173	A1 AD
B145	●○ ○○ ●● ○○	1367	LU02	U	0	LATIN CAPITAL LETTER U	3, 4, 5	085	55
B146	○○ ○○ ●● ○○	2367	SF08	━	0	BOX DRAWINGS LIGHT VERTICAL AND RIGHT	4, 5	195	C3
B147	●○ ●○ ●○	12367	LV02	V	0	LATIN CAPITAL LETTER V	3, 4, 5	086	56
B150	○○ ○○ ○○ ●○	467	SC02	£	0	POUND SIGN	3 4, 5	163 156	A3 9C
B151	●○ ○○ ●○ ○○	1467	LI16	î	0	LATIN CAPITAL LETTER I WITH CIRCUMFLEX	3 4	206 215	CE D7
			SA80	√	1	RADICAL SIGN	5	251	FB
B152	○○ ○○ ●○ ○○	2467	LO62	Ø	0	LATIN CAPITAL LETTER O WITH STROKE	3 4	216 157	D8 9D
			SA45	∞	1	INFINITY SIGN	5	236	EC
B153	●○ ●○ ●○	12467	SF05	+	0	BOX DRAWINGS LIGHT VERTICAL AND HORIZONTAL	4, 5	197	C5
B154	○○ ○○ ●○ ○○	3467	LA20	Ä	0	LATIN CAPITAL LETTER A WITH TILDE	3 4	195 199	C3 C7
			SF47	━	1	BOX DRAWINGS DOWN LIGHT AND HORIZONTAL HEAVY	5	209	D1
B155	●○ ●○ ●○	13467	LX02	X	0	LATIN CAPITAL LETTER X	3, 4, 5	088	58
B156	○○ ○○ ●○ ○○	23467	SD15	^	0	CIRCUMFLEX ACCENT	3, 4, 5	094	5E
B157	●○ ●○ ●○ ●○	123467	LC42	ç	0	LATIN CAPITAL LETTER C WITH CEDILLA	3 4, 5	199 128	C7 80
B160	○○ ○○ ●○ ○○	567	LA18	Ä	0	LATIN CAPITAL LETTER A WITH DIAERESIS	3 4, 5	196 142	C4 8E

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B161	•○ ○○ ○● ●○	1567	LU16	Û	0	LATIN CAPITAL LETTER U WITH CIRCUMFLEX		3 4	219 234	DB EA
			SS27	J	1	BIG INTEGRAL SIGN LOWER HALF		5	245	F5
B162	○○ ○● ●○	2567	LN20	Ñ	0	LATIN CAPITAL LETTER N WITH TILDE	3 4, 5	209 165	D1 A5	
B163	•○ ○○ ○● ●○	12567	SF57	■	0	LOWER HALF BLOCK	4, 5	220	DC	
B164	○○ ○● ●○	3567	LD62	Đ	0	LATIN CAPITAL LETTER D WITH STROKE; LATIN CAPITAL LETTER ETH (icelandic)	3 4	208 209	D0 D1	
			SF54	+	1	BOX DRAWINGS VERTICAL LIGHT AND HORIZONTAL HEAVY	5	216	D8	
B165	•○ ○○ ○● ●○	13567	LZ02	Z	0	LATIN CAPITAL LETTER Z	3, 4, 5	090	5A	
B166	○○ ○● ●○	23567	SF39	■	0	BOX DRAWINGS HEAVY DOWN AND RIGHT	4, 5	201	C9	
B167	•○ ○○ ○● ●○	123567	SM06	[	0	LEFT SQUARE BRACKET	3, 4, 5	091	5B
B170	○○ ○○○ ○● ●○	4567	SP09	—	0	LOW LINE; UNDERLINE	3, 4, 5	095	5F	
B171	•○ ○○ ○● ●○	14567	LO16	Ô	0	LATIN CAPITAL LETTER O WITH CIRCUMFLEX	3 4	212 226	D4 E2	
			SM68	¬	1	INVERTED NOT SIGN	5	169	A9	
B172	○○ ○○○ ○● ●○	24567	LW02	W	0	LATIN CAPITAL LETTER W	3, 4, 5	087	57	
B173	●● ○○○ ○● ●○	124567	SF60	■	0	UPPER HALF BLOCK	4, 5	223	DF	
B174	○○ ○○○ ○● ●○	34567	LA28	Å	0	LATIN CAPITAL LETTER A WITH RING ABOVE	3 4, 5	197 143	C5 8F	
B175	●● ○○○ ○● ●○	134567	LY02	Ý	0	LATIN CAPITAL LETTER Y	3, 4, 5	089	59	
B176	○○ ○○○ ○● ●○	234567	SM08	]	0	RIGHT SQUARE BRACKET	3, 4, 5	093	5D
B177	●● ○○○ ○● ●○	1234567	LE12	É	0	LATIN CAPITAL LETTER E WITH ACUTE	3 4, 5	201 144	C9 90	
B200	○○ ○○○ ○○○ ○●	8	SF40	▬	0	BOX DRAWINGS HEAVY UP AND HORIZONTAL	4, 5	202	CA	
B201	●○ ○○○ ○○○ ○●	18	NS01	¹	0	SUPERSCRIPT ONE	3 4	185 251	B9 FB	
			GA01	α	1	GREEK SMALL LETTER ALPHA	5	224	E0	

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)				8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B202	○○ ●● ○○ ○●	28	LA12	Á	0	LATIN CAPITAL LETTER A WITH ACUTE	3 4	193 181	C1 B5
			SF48	⊜	1	BOX DRAWINGS DOWN HEAVY AND HORIZONTAL LIGHT	5	210	D2
B203	●○ ○○ ●● ○●	128	NS02	²	0	SUPERSCRIPT TWO	3 4, 5	178 253	B2 FD
B204	○○ ○○ ●● ○●	38	SP16	⌇	0	INVERTED QUESTION MARK	3 4, 5	191 168	BF A8
B205	●○ ○○ ●● ○●	138	SF06	⊜	0	BOX DRAWINGS LIGHT DOWN AND HORIZONTAL	4, 5	194	C2
B206	○○ ○○ ●● ○●	238	SF41	⊜	0	BOX DRAWINGS HEAVY DOWN AND HORIZONTAL	4, 5	203	CB
B207	●○ ○○ ●● ○●	1238	SF42	⊜	0	BOX DRAWINGS HEAVY VERTICAL AND RIGHT	4, 5	204	CC
B210	○○ ○○ ○○ ○●	48	SD17	⠄⠄	0	DIAERESIS	3 4	168 249	A8 F9
			SD28	•	1	FULL RING ABOVE	5	249	F9
B211	●○ ○○ ○○ ○●	148	NS03	³	0	SUPERSCRIPT THREE	3 4	179 252	B3 FC
			SF22	⊜	1	BOX DRAWINGS DOWN LIGHT AND LEFT HEAVY	5	184	B8
B212	○○ ●○ ○○ ○●	248	LI61	⠇	0	LATIN SMALL LETTER DOTLESS I	4	213	D5
			SF50	⊜	1	BOX DRAWINGS UP LIGHT AND RIGHT HEAVY	5	212	D4
B213	●○ ○○ ○○ ○●	1248	SM10	=	0	DOUBLE UNDERLINE	4	242	F2
			GF01	φ	1	GREEK SMALL LETTER PHI	5	237	ED
B214	○○ ○○ ○○ ○●	348	LI13	⠄⠄⠄	0	LATIN SMALL LETTER I WITH GRAVE	3 4, 5	236 141	EC 8D
B215	●○ ○○ ○○ ○●	1348	SM17	⠄⠄⠄⠄	0	MICRO SIGN	3 4, 5	181 230	B5 E6
			GM01	⠄⠄⠄⠄⠄	1	GREEK SMALL LETTER MU	3 4, 5	181 230	B5 E6
B216	○○ ●○ ○○ ○●	2348	SA07	⠄⠄⠄⠄⠄⠄	0	MULTIPLICATION SIGN	3 4	215 158	D7 9E
			GS01	⠄⠄⠄⠄⠄⠄⠄	1	GREEK SMALL LETTER SIGMA	5	229	E5
B217	●○ ○○ ●○ ○●	12348	LT63	⠄⠄⠄⠄⠄⠄⠄⠄	0	LATIN SMALL LETTER THORN (icelandic)	3 4	254 231	FE E7
			GP01	⠄⠄⠄⠄⠄⠄⠄⠄⠄⠄	1	GREEK SMALL LETTER PI	5	227	E3

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex	
B220	○○●○○●	58	SC04	¢	0	CENT SIGN	3 4 5	162 189 155	A2 BD 9B	
B221	●○○●○○●	158	SM65	⋮	0	BROKEN BAR	3 4	166 221	A6 DD	
			GE01	ε	1	GREEK SMALL LETTER EPSILON	5	238	EE	
B222	○○●●○○●	258	LI12	í	0	LATIN CAPITAL LETTER I WITH ACUTE	3 4	205 214	CD D6	
			SA91	Γ	1	GAMMA FUNCTION	5	226	E2	
			GG02	Γ	2	GREEK CAPITAL LETTER GAMMA	5	226	E2	
B223	●○●●○○●	1258	SM21	α	0	FEMININE ORDINAL INDICATOR	3 4, 5	170 166	AA A6	
B224	○○●●○○●	358	LO18	Ö	0	LATIN CAPITAL LETTER O WITH DIAERESIS	3 4, 5	214 153	D6 99	
B225	●○●●○○●	1358	LO19	ö	0	LATIN SMALL LETTER O WITH TILDE	3 4	245 228	F5 E4	
			SF52	━	1	BOX DRAWINGS DOWN HEAVY AND RIGHT LIGHT	5	214	D6	
B226	○○●●○○●	2358	LE18	Ё	0	LATIN CAPITEL LETTER E WITH DIAERESIS	3 4	203 228	CB E4	
			GF02	Φ	1	GREEK CAPITAL LETTER PHI	5	232	E8	
B227	●○●●○○●	12358	SM53	®	0	REGISTERED SIGN	3 4	174 169	AE A9	
			SF53	+	1	BOX DRAWINGS VERTICAL HEAVY AND HORIZONTAL LIGHT	5	215	D7	
B230	○●●●○○●	458	SD31	—	0	MACRON	3 4	175 238	AF EE	
			SA53	≥	1	GREATER-THAN OR EQUALS SIGN	5	242	F2	
B231	●●●●○○●	1458	SM25	¶	0	PILCROW SIGN	3 4, 5 4	182 020 244	B6 14 F4	
			GD01	δ	1	GREEK SMALL LETTER DELTA	5	235	EB	
B232	○●●●○○●	2458	SM20	º	0	MASCULINE ORDINAL INDICATOR	3 4, 5	186 167	BA A7	
B233	●●●●○○●	12458	SF25	━	0	BOX DRAWINGS HEAVY DOWN AND LEFT	4, 5	187	BB	
B234	○●●●○○●	3458	LA17	ä	0	LATIN SMALL LETTER A WITH DIAERESIS	3 4, 5	228 132	E4 84	

Table 1 (continued)

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B256	○● ○● ○●	23468	LE13	è	0	LATIN SMALL LETTER E WITH GRAVE		3 4, 5	232 138	E8 8A
B257	●● ●● ○●	123468	SM52	©	0	COPYRIGHT SIGN		3 4	169 184	A9 B8
			SF51	■	1	BOX DRAWINGS DOWN LIGHT AND RIGHT HEAVY		5	213	D5
B260	○○ ○●● ○●●	568	SD11	'	0	ACUTE ACCENT		3 4	180 239	B4 EF
			SA52	≤	1	LESS-THAN OR EQUALS SIGN		5	243	F3
B261	●○ ○●● ○●●	1568	LU11	ú	0	LATIN SMALL LETTER U WITH ACUTE		3 4, 5	250 163	FA A3
B262	○○ ○●● ○●●	2568	LO12	Ó	0	LATIN CAPITAL LETTER O WITH ACUTE		3 4	211 224	D3 E0
			GT62	Θ	1	GREEK CAPITAL LETTER THETA		5	233	E9
B263	●○ ○●● ○●●	12568	LU17	ü	0	LATIN SMALL LETTER U WITH DIAERESIS		3 4, 5	252 129	FC 81
B264	○○ ○●● ○●●	3568	LY12	Ý	0	LATIN CAPITAL LETTER Y WITH ACUTE		3 4	221 237	DD ED
			SM18	Ω	1	OHM SIGN		5	234	EA
			GO32	Ω	2	GREEK CAPITAL LETTER OMEGA		5	234	EA
B265	●○ ○○● ○○●	13568	SF09	-	0	BOX DRAWINGS LIGHT VERTICAL AND LEFT		4, 5	180	B4
B266	○○ ○●● ○●●	23568	LI18	ĩ	0	LATIN CAPITAL LETTER I WITH DIAERESIS		3 4	207 216	CF D8
			SA48	≡	1	IS IDENTICAL TO SIGN		5	240	F0
B267	●○ ○●● ○●●	123568	LA13	à	0	LATIN SMALL LETTER A WITH GRAVE		3 4, 5	224 133	E0 85
B270	○○ ○●● ○●●	4568	SM19	°	0	DEGREE SIGN		3 4, 5	176 248	B0 F8
				-	1	4-DOT BRAILLE ORIENTATION MARK (not assigned to any graphic or control character)				
B271	●● ○●● ○●●	14568	LO11	ó	0	LATIN SMALL LETTER O WITH ACUTE		3 4, 5	243 162	F3 A2
B272	○○ ○●● ○●●	24568	LY11	ý	0	LATIN SMALL LETTER Y WITH ACUTE		3 4	253 236	FD EC
			SF20	-	1	BOX DRAWINGS VERTICAL HEAVY AND LEFT LIGHT		5	182	B6

Table 1 (*continued*)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph, symbol or acronym	Rank	Name		Code table	Dez.	Hex
B273		124568	LI17	ī	0	LATIN SMALL LETTER I WITH DIAERESIS		3 4, 5	239 139	EF 8B
B274		34568	LS61	ß	0	LATIN SMALL LETTER SHARP S (German)		3 4, 5	223 225	DF E1
			GB01	β	1	GREEK SMALL LETTER BETA		3 4, 5	223 225	DF E1
B275		134568	LY17	ÿ	0	LATIN SMALL LETTER Y WITH DIAERESIS		3 4, 5	255 152	FF 98
B276		234568	LU13	ù	0	LATIN SMALL LETTER U WITH GRAVE		3 4, 5	249 151	F9 97
B277		1234568	LE11	é	0	LATIN SMALL LETTER E WITH ACUTE		3 4, 5	233 130	E9 82
B300		78	SF14		0	LIGHT SHADE (25 percent)		4, 5	176	B0
B301		178	SS00		0	SMILING FACE WHITE		4, 5	001	01
				-	SOH	CONTROL CHARACTER SOH: START OF HEADING		3	001	01
B302		278	SF03		0	BOX DRAWINGS LIGHT DOWN AND LEFT		4, 5	191	BF
B303		1278	SS01		0	SMILING FACE BLACK		4, 5	002	A2
				-	STX	CONTROL CHARACTER STX: START OF TEXT		3	002	A2
B304		378	SF02		0	BOX DRAWINGS LIGHT UP AND RIGHT		4, 5	192	C0
B305		1378	SM28		0	MALE SYMBOL		4, 5	011	0B
					VT	CONTROL CHARACTER VT: LINE TABULATION		3	011	0B
B306		2378	SF38		0	BOX DRAWINGS HEAVY UP AND RIGHT		4, 5	200	C8
B307		12378	SM29		0	FEMALE SYMBOL		4, 5	012	0C
					FF	CONTROL CHARACTER FF: FORM FEED		3	012	0C
B310		478	LA51	æ	0	LATIN SMALL LIGATURE A E		3 4, 5	230 145	E6 91
B311		1478	SS02		0	HEART SYMBOL		4, 5	003	03
					ETX	CONTROL CHARACTER ETX: END OF TEXT		3	003	03

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)				8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B312	○●○○○●	2478	SM75	○	0	MEDIUM CIRCLE	4, 5	009	09
				HT	1	CONTROL CHARACTER HT: CHARACTER TABULATION	3	009	09
B313	●●○○○●	12478	SS05	♠	0	SPADE SYMBOL	4, 5	006	06
				ACK	1	CONTROL CHARACTER ACK: ACKNOWLEDGE	3	006	06
B314	○○○●○●	3478	-	SM3	0	SHIFT MARK THREE (not assigned to any graphic or control character)	3, 4, 5	028	1C
			SM71	↳	1	ROTATED NOT SIGN	4, 5	028	1C
			-	IS4	2	CONTROL CHARACTER IS4: INFORMATION SEPARATOR FOUR	3	028	1C
			-	FS	3	CONTROL CHARACTER FS: FILE SEPARATOR	3	028	1C
B315	●●○○○●	13478	SM93	♪	0	MUSIC NOTE	4, 5	013	0D
			-	CR	1	CONTROL CHARACTER CR: CARRIAGE RETURN	3	013	0D
B316	○●○○○●	23478	SP33	!!	0	DOUBLE EXCLAMATION MARK	4, 5	019	13
			-	DC3	1	CONTROL CHARACTER DC3: DEVICE CONTROL THREE	3	019	13
B317	●●○○○●	123478	SM59	▶	0	BLACK RIGHT-POINTING TRIANGLE	4, 5	016	10
			-	DLE	1	CONTROL CHARACTER DLE: DATA LINK ESCAPE	3	016	10
B320	○○○●○●	578	LO14	Ø	0	LATIN CAPITAL LETTER O WITH GRAVE	3 4	210 227	D2 E3
			SA38*	∩	1	INTERSECTION SIGN	5	239	EF
B321	●●○○○●	1578	SS04*	♣	0	CLUB SYMBOL	4, 5	005	05
			-	ENQ	1	CONTROL CHARACTER ENQ: ENQUIRY	3	005	05
B322	○○○●○●	2578	SF43*	—	0	BOX DRAWINGS HEAVY HORIZONTAL	4, 5	205	CD
B323	●●○○○●	12578	SM58	●	0	INVERSE CIRCLE BULLET	4, 5	008	08
				BS	1	CONTROL CHARACTER BS: BACKSPACE	3	008	08

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)				8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B324	○○ ○● ●○ ●●	3578	LE14	È	0	LATIN CAPITAL LETTER E WITH GRAVE	3 4	200 212	C8 D4
			SA70	≈	1	ALMOST EQUALS SIGN	5	247	F7
B325	●○ ○● ●●	13578	SM69	◊	0	RADIANT SUN	4, 5	015	0F
			-	SI	1	CONTROL CHARACTER SI: SHIFT IN	3	015	0F
			-	LS1	2	CONTROL CHARACTER LS1: LOCKING SHIFT ONE	3	015	0F
B326	○○ ●○ ●●	23578	SA02	±	0	PLUS-MINUS SIGN	3 4, 5	177 241	BI F1
B327	●○ ○● ●●	123578	SM76	↕	0	UP AND DOWN POINTING ARROW	4, 5	018	12
				DC2	1	CONTROL CHARACTER DC2: DEVICE CONTROL TWO	3	018	12
B330	○● ○○ ●●	4578	SP18	»	0	RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK	3 4, 5	187 175	BB AF
B331	●● ○○ ●●	14578	SS03	◆	0	DIAMOND SYMBOL	4, 5	004	04
				EOT	1	CONTROL CHARACTER EOT: END OF TRANSMISSION	3	004	04
B332	○● ○○ ●●	24578	SM74	□	0	INVERSE MEDIUM CIRCLE	4, 5	010	0A
			-	LF	1	CONTROL CHARACTER LF: LINE FEED	3	010	0A
B333	●● ○○	124578	SM57	●	0	FULL CIRCLE BULLE	4, 5	007	07
			-	BEL	1	CONTROL CHARACTER BEL: BELL	3	007	07
B334	○● ○○ ●●	34578		NUL	0	CONTROL CHARACTER NUL: NULL	4, 5	000	00
B335	●● ○○ ●●	134578	SM91	♪	0	DOUBLE MUSIC NOTE	4, 5	014	0E
			-	SO	1	CONTROL CHARACTER SO: SHIFT-OUT	3	014	0E
			-	LS0	2	CONTROL CHARACTER LS0: LOCKING SHIFT ZERO	3	014	0E
B336	○● ○○ ●●	234578	-	DC4	0	CONTROL CHARACTER DC4: DEVICE CONTROL FOUR	3, 4, 5	020	14
B337	●● ○○ ●●	1234578	SM63	◀	0	BLACK LEFT-POINTING TRIANGLE	4, 5	017	11
			-	DC1	1	CONTROL CHARACTER DC1: DEVICE CONTROL ONE	3	017	11

Table 1 (continued)

Braille character		Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B340	○○ ○○ ●●	678	SF04	└	0	BOX DRAWINGS LIGHT UP AND LEFT	4, 5	217	D9
B341	●○ ○○ ●●	1678	LA15	â	0	LATIN SMALL LETTER A WITH CIRCUMFLEX	3 4, 5	226 131	E2 83
B342	○○ ○○ ●●	2678	SF26	■	0	BOX DRAWINGS HEAVY UP AND LEFT	4, 5	188	BC
B343	●○ ○○ ●●	12678	LE15	ê	0	LATIN SMALL LETTER E WITH CIRCUMFLEX	3 4, 5	234 136	EA 88
B344	○○ ○○ ●●	3678	SF15	■■■	0	MEDIUM SHADE (50 percent)	4, 5	177	81
B345	●○ ○○ ●●	13678	-	§	0	PARAGRAPH SIGN	4, 5	021	15
			-	NAK	1	CONTROL CHARACTER NAK: NEGATIVE ACKNOWLEDGE	3	021	15
B346	○○ ●●	23678	LA14	À	0	LATIN CAPITAL LETTER A WITH GRAVE	3 4	192 183	C0 B7
			SF58	█	1	LEFT HALF BLOCK	5	221	DD
B347	●○ ●●	123678	SM70	-	0	FULL RECTANGLE	4, 5	022	16
			.	SYN	1	CONTROL CHARACTER SYN: SYNCHRONOUS IDLE	3	022	16
B350	○○ ○○ ●●	4678	SC01	¤	0	CURRENCY SIGN	3 4	164 207	A4 CF
			SF27	└	1	BOX DRAWINGS UP HEAVY AND LEFT LIGHT	5	189	BD
B351	●○ ○○ ●●	14678	LI15	↑	0	LATIN SMALL LETTER I WITH CIRCUMFLEX	3 4, 5	238 140	EE 8C
B352	○○ ○○ ●●	24678	LO61	ø	0	LATIN SMALL LETTER O WITH STROKE	3 4	248 155	F8 9B
			SF49	└	1	BOX DRAWINGS UP HEAVY AND RIGHT LIGHT	5	211	D3
B353	●○ ●○ ●●	124678	SC07	f	0	FLORIN SIGN	4, 5	159	9F
			SA50	DCS	1	FUNCTION OF SIGN	3	144	90
B354	○○ ●●	34678	LA19	ã	0	LATIN SMALL LETTER A WITH TILDE	3 4	227 198	E3 C6
			SF28	└	1	BOX DRAWINGS UP LIGHT AND LEFT HEAVY	5	190	BE
B355	●○ ○○ ●●	134678	SM32	↑	0	UPWARDS POINTING ARROW	4, 5	024	18
			-	CAN	1	CONTROL CHARACTER CAN: CANCEL	3	024	18

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B356		234678	-	SM1	0	SHIFT MARK ONE (not assigned to any graphic or control character)		3, 4, 5	030	1E
			SM60	▲	1	BLACK UP-POINTING TRIANGLE		4, 5	030	1E
			-	IS2	2	CONTROL CHARACTER IS2: INFORMATION SEPARATOR TWO		3	030	1E
			-	RS	3	CONTROL CHARACTER RS: RECORD SEPARATOR		3	030	1E
B357		1234678	LC41	ç	0	LATIN SMALL LETTER C WITH CEDILLA		3 4, 5	231 135	E7 87
B360		5678	SP17	«	0	LEFT-POINTING DOUBLE ANGLE QUOTATION MARK		3 4, 5	171 174	AB AE
B361		15678	LU15	û	0	LATIN SMALL LETTER U WITH CIRCUMFLEX		3 4, 5	251 150	FB 96
B362		25678	SM66	¬	0	NOT SIGN		3 4, 5	172 170	AC AA
B363		125678	SA06	÷	0	DIVISION SIGN		3 4, 5	247 246	F7 F6
B364		35678	LU14	Ù	0	LATIN CAPITAL LETTER U WITH GRAVE		3 4	217 235	D9 EB
			SF59	█	1	RIGHT HALF BLOCK		5	222	DE
B365		135678	SM31	→	0	RIGHTWARDS ARROW		4, 5	026	1A
			-	SUB	1	CONTROL CHARACTER SUB: SUBSTITUTE		3	026	1A
B366		235678	SF16	■	0	DARK SHADE (75 percent)		4, 5	178	B2
B367		1235678	SM30	←	0	LEFTWARDS ARROW		4, 5	027	1B
			-	ESC	1	CONTROL CHARACTER ESC. ESCAPE		3	027	1B
B370		45678	SM62	▼	0	BLACK DOWN-POINTING TRIANGLE		4, 5	031	1F
			-	IS1	1	CONTROL CHARACTER IS1: INFORMATION SEPARATOR ONE		3	031	1F
			-	US	2	CONTROL CHARACTER US: UNIT SEPARATOR		3	031	1F
B371		145678	LO15	ô	0	LATIN SMALL LETTER O WITH CIRCUMFLEX		3 4, 5	244 147	F4 93
B372		245678	SM77	↑	0	UPWARDS AND DOWNTOWARDS ARROW WITH UNDERBAR		4, 5	023	17
			-	ETB	1	CONTROL CHARACTER ETB: END OF TRANSMISSION BLOCK		3	023	17

Table 1 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or ac- ronym	Rank	Name		Code table	Dez.	Hex
B373		1245678	SF44	+	0	BOX DRAWINGS HEAVY VERTICAL AND HORIZONTAL		4, 5	206	CE
B374		345678	LA27	å	0	LATIN SMALL LETTER A WITH RING ABOVE		3 4, 5	229 134	E5 86
B375		1345678	SM33	↓	0	DOWNWARDS ARROW		4, 5	025	19
B376		2345678	-	EM	1	CONTROL CHARACTER EM: END OF MEDIUM		3	025	19
B377		12345678	SF61	■	0	SHIFT MARK TWO (not assigned to any graphic or control character)		3, 4, 5	029	1D
					1	LEFT AND RIGHT POINTING ARROW				
					2	CONTROL CHARACTER IS3: INFORMATION SEPARATOR THREE				
				GS	3	CONTROL CHARACTER GS: GROUP SEPARATOR		3	029	1D
					0	FULL BLOCK				
					1	CONTROL CHARACTER APC:				
				APC	2	8-DOT BRAILLE ORIENTATION MARK (not assigned to any graphic or control character)		4, 5	219	DB
					3	8-DOT CURSOR (not assigned to any graphic or control character)				

Table 2 — 8-dot Braille characters, arranged according to their meaning

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
Latin alphabetic characters										
B001	•○ ○○ ○○	1	LA01	a	0	LATIN SMALL LETTER A		3, 4, 5	097	61
B101	•○ ○○ ○○ ●○	17	LA02	A	0	LATIN CAPITAL LETTER A		3, 4, 5	065	41
B241	•○ ○○ ○○ ○○	168	LA11	á	0	LATIN SMALL LETTER A WITH ACUTE		3 4, 5	225 160	E1 A0
B202	○○ ●○ ○○ ○○	28	LA12	Á	0	LATIN CAPITAL LETTER A WITH ACUTE		3 4	193 181	C1 B5
B267	•○ ○○ ○○	123568	LA13	à	0	LATIN SMALL LETTER A WITH GRAVE		3 4, 5	224 133	E0 85
B346	○○ ○○ ○○	23678	LA14	À	0	LATIN CAPITAL LETTER A WITH GRAVE		3 5	192 183	C0 87
B341	•○ ○○ ○○	1678	LA15	â	0	LATIN SMALL LETTER A WITH CIRCUMFLEX		3 4, 5	226 131	E2 83
B141	•○ ○○ ○○	167	LA16	Â	0	LATIN CAPITAL LETTER A WITH CIRCUMFLEX		3 4	194 182	C2 B6
B234	○○ ○○ ○○	3458	LA17	ä	0	LATIN SMALL LETTER A WITH DIAERESIS		3 4, 5	228 132	E4 84
B160	○○ ○○ ○○	567	LA18	Ä	0	LATIN CAPITAL LETTER A WITH DIAERESIS		3 4, 5	196 142	C4 8E
B354	○○ ○○ ○○	34678	LA19	ã	0	LATIN SMALL LETTER A WITH TILDE		3 4	227 198	E3 C6
B154	○○ ○○ ○○	3467	LA20	Ã	0	LATIN CAPITAL LETTER A WITH TILDE		3 4	195 199	C3 C7
B374	○○ ○○ ○○	345678	LA27	å	0	LATIN SMALL LETTER A WITH RING ABOVE		3 4, 5	229 134	E5 86
B174	○○ ○○ ○○	34567	LA28	Å	0	LATIN CAPITAL LETTER A WITH RING ABOVE		3 4, 5	197 143	C5 8F
B310	○○ ○○ ○○	478	LA51	æ	0	LATIN SMALL LIGATURE A E		3 4, 5	230 145	E6 91
B110	○○ ○○ ○○	47	LA52	Æ	0	LATIN CAPITAL LIGATURE A E		3 4, 5	198 146	C6 92
B003	•○ ○○ ○○	12	LB01	b	0	LATIN SMALL LETTER B		3, 4, 5	098	62
B103	•○ ○○ ○○	127	LB02	B	0	LATIN CAPITAL LETTER B		3, 4, 5	066	42
B011	•○ ○○ ○○	14	LC01	c	0	LATIN SMALL LETTER C		3, 4, 5	099	63
B111	•○ ○○ ○○	147	LC02	C	0	LATIN CAPITAL LETTER C		3, 4, 5	067	43
B357	•○ ○○ ○○	1234678	LC41	ç	0	LATIN SMALL LETTER C WITH CEDILLA		3 4, 5	231 135	E7 87

—+—+—+—+—+—+—+—+—+—+—

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)				8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B157	••○ ●○○	123467	LC42	Ç	0	LATIN CAPITAL LETTER C WITH CEDILLA	3 4, 5	199 128	C7 80
B031	••○ ○○○ ○○	145	LD01	d	0	LATIN SMALL LETTER D	3, 4, 5	100	64
B131	••○ ○○○ ○○	1457	LD02	D	0	LATIN CAPITAL LETTER D	3, 4, 5	068	44
B164	○○ ●●○	3567	LD62	Đ	0	LATIN CAPITAL LETTER D WITH STROKE; LATIN CAPITAL LETTER ETH (icelandic)	3 4	208 209	D0 D1
B236	○○ ●●○ ○○	23458	LD63	ð	0	LATIN SMALL LETTER ETH (icelandic)	3 4	240 208	F0 D0
B021	○○ ○○○ ○○○	15	LE01	e	0	LATIN SMALL LETTER E	3, 4, 5	101	65
B121	○○ ○○○ ○○	157	LE02	E	0	LATIN CAPITAL LETTER E	3, 4, 5	069	45
B277	••○ ●●○ ○○	1234568	LE11	é	0	LATIN SMALL LETTER E WITH ACUTE	3 4, 5	233 130	E9 82
B177	••○ ●●○ ○○	1234567	LE12	É	0	LATIN CAPITAL LETTER E WITH ACUTE	3 4, 5	201 144	C9 90
B256	○○ ●●○ ○○	23468	LE13	è	0	LATIN SMALL LETTER E WITH GRAVE	3 4, 5	232 138	E8 8A
B324	○○ ●●○ ○○	3578	LE14	È	0	LATIN CAPITAL LETTER E WITH GRAVE	3 4	200 212	C8 D4
B343	○○ ●●○ ○○	12678	LE15	ê	0	LATIN SMALL LETTER E WITH CIRCUMFLEX	3 4, 5	234 136	EA 88
B143	○○ ●●○ ○○	1267	LE16	Ê	0	LATIN CAPITAL LETTER E WITH CIRCUMFLEX	3 4	202 210	CA D2
B253	••○ ●●○ ○○	12468	LE17	ë	0	LATIN SMALL LETTER E WITH DIAERESIS	3 4, 5	235 137	EB 89
B226	○○ ●●○ ○○	2358	LE18	Ë	0	LATIN CAPITAL LETTER E WITH DIAERESIS	3 4	203 228	CB E4
B013	••○ ●●○ ○○○	124	LF01	f	0	LATIN SMALL LETTER F	3, 4, 5	102	66
B113	••○ ●●○ ○○○	1247	LF02	F	0	LATIN CAPITAL LETTER F	3, 4, 5	070	46
B033	••○ ○○○ ○○	1245	LG01	g	0	LATIN SMALL LETTER G	3, 4, 5	103	67
B133	••○ ○○○ ○○○	12457	LG02	G	0	LATIN CAPITAL LETTER G	3, 4, 5	071	47
B023	○○ ●●○ ○○○	125	LH01	h	0	LATIN SMALL LETTER H	3, 4, 5	104	68
B123	○○ ●●○ ○○○	1257	LH02	H	0	LATIN CAPITAL LETTER H	3, 4, 5	072	48
B012	○○ ●●○ ○○○	24	LI01	i	0	LATIN SMALL LETTER I	3, 4, 5	105	69

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex	
B112	○● ●○ ○○ ○●	247	LI02	I	0	LATIN CAPITAL LETTER I	3, 4, 5	073	49	
B251	●● ○○ ○●	1468	LI11	í	0	LATIN SMALL LETTER I WITH ACUTE	3 4, 5	237 161	ED A1	
B222	○○ ●● ○○ ○●	258	LI12	Í	0	LATIN CAPITAL LETTER I WITH ACUTE	3 4	205 214	CD D6	
B214	○● ●○ ○○ ○●	348	LI13	ì	0	LATIN SMALL LETTER I WITH GRAVE	3 4, 5	236 141	EC 8D	
B120	○○ ●● ○○ ●○	57	LI14	Ì	0	LATIN CAPITAL LETTER I WITH GRAVE	3 4	204 222	CC DE	
B351	●● ○○ ●●	14678	LI15	î	0	LATIN SMALL LETTER I WITH CIRCUMFLEX	3 4, 5	238 140	EE 8C	
B151	●● ○○ ●●	1467	LI16	Í	0	LATIN CAPITAL LETTER I WITH CIRCUMFLEX	3 4	206 215	CE D7	
B273	●● ●● ○○	124568	LI17	ĩ	0	LATIN SMALL LETTER I WITH DIAERESIS	3 4, 5	239 139	EF 8B	
B266	○○ ●● ○○	23568	LI18	Ĩ	0	LATIN CAPITAL LETTER I WITH DIAERESIS	3 4	207 216	CF D8	
B212	○○ ●● ○○ ○●	248	LI61	ı	0	LATIN SMALL LETTER DOTLESS I	4	213	D5	
B032	○● ●○ ○○	245	LJ01	j	0	LATIN SMALL LETTER J	3, 4, 5	106	6A	
B132	○● ●○ ○●	2457	LJ02	J	0	LATIN CAPITAL LETTER J	3, 4, 5	074	4A	
B005	●○ ○○ ●○	13	LK01	k	0	LATIN SMALL LETTER K	3, 4, 5	107	6B	
B105	●○ ○○ ●○	137	LK02	K	0	LATIN CAPITAL LETTER K	3, 4, 5	075	4B	
B007	●○ ○○ ●○	123	LL01	l	0	LATIN SMALL LETTER L	3, 4, 5	108	6C	
B107	●○ ○○ ●○	1237	LL02	L	0	LATIN CAPITAL LETTER L	3, 4, 5	076	4C	
B015	●● ○○ ●○	134	LM01	m	0	LATIN SMALL LETTER M	3, 4, 5	109	6D	
B115	●● ○○ ●○	1347	LM02	M	0	LATIN CAPITAL LETTER M	3, 4, 5	077	4D	
B035	●● ○○ ●○	1345	LN01	n	0	LATIN SMALL LETTER N	3, 4, 5	110	6E	
B135	●● ○○ ●○	13457	LN02	N	0	LATIN CAPITAL LETTER N	3, 4, 5	078	4E	
B235	●● ○○ ●○	13458	LN19	ñ	0	LATIN SMALL LETTER N WITH TILDE	3 4, 5	241 164	FI A4	
B162	○○ ●● ○○	2567	LN20	Ñ	0	LATIN CAPITAL LETTER N WITH TILDE	3 4, 5	209 165	D1 A5	

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B025	•○ ○○ ●● ○○	135	LO01	o	0	LATIN SMALL LETTER O		3, 4, 5	111	6F
B125	•○ ○○ ●● ●○	1357	LO02	O	0	LATIN CAPITAL LETTER O		3, 4, 5	079	4F
B271	●● ○○ ●● ○○	14568	LO11	ó	0	LATIN SMALL LETTER O WITH ACUTE		3 4, 5	243 162	F3 A2
B262	○○ ●● ○○	2568	LO12	Ó	0	LATIN CAPITAL LETTER O WITH ACUTE		3 4	211 224	D3 E0
B254	○○ ○○ ●● ○○	3468	LO13	ò	0	LATIN SMALL LETTER O WITH GRAVE		3 4, 5	242 149	F2 95
B320	○○ ○○ ●● ○○	578	LO14	Ò	0	LATIN CAPITAL LETTER O WITH GRAVE		3 4	210 227	D2 E3
B371	●● ○○ ●● ●●	145678	LO15	ô	0	LATIN SMALL LETTER O WITH CIRCUMFLEX		3 4, 5	244 147	F4 93
B171	●● ○○ ●● ●○	14567	LO16	Ô	0	LATIN CAPITAL LETTER O WITH CIRCUMFLEX		3 4	212 226	D4 E2
B252	○○ ●● ○○ ○○	2468	LO17	ö	0	LATIN SMALL LETTER O WITH DIAERESIS		3 4, 5	246 148	F6 94
B224	○○ ○○ ●● ○○	358	LO18	Ö	0	LATIN CAPITAL LETTER O WITH DIAERESIS		3 4, 5	214 153	D6 99
B225	○○ ●● ○○ ○○	1358	LO19	õ	0	LATIN SMALL LETTER O WITH TILDE		3 4	245 228	F5 E4
B142	○○ ●● ○○ ●○	267	LO20	Õ	0	LATIN CAPITAL LETTER O WITH TILDE		3 4	213 229	D5 E5
B352	○○ ●● ○○ ●●	24678	LO61	ø	0	LATIN SMALL LETTER O WITH STROKE		3 4	248 155	F8 9B
B152	○○ ●● ○○ ●○	2467	LO62	Ø	0	LATIN CAPITAL LETTER O WITH STROKE		3 4	216 157	D8 9D
B017	●● ○○ ●● ○○	1234	LP01	p	0	LATIN SMALL LETTER P		3, 4, 5	112	70
B117	●● ●● ●● ●○	12347	LP02	P	0	LATIN CAPITAL LETTER P		3, 4, 5	080	50
B037	●● ●● ●● ○○	12345	LQ01	q	0	LATIN SMALL LETTER Q		3, 4, 5	113	71
B137	●● ●● ●● ●○	123457	LQ02	Q	0	LATIN CAPITAL LETTER Q		3, 4, 5	081	51
B027	●○ ●● ○○	1235	LR01	r	0	LATIN SMALL LETTER R		3, 4, 5	114	72
B127	●○ ●● ●● ●○	12357	LR02	R	0	LATIN CAPITAL LETTER R		3, 4, 5	082	52
B016	○○ ●● ●● ○○	234	LS01	s	0	LATIN SMALL LETTER S		3, 4, 5	115	73

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B116	○● ○○ ●● ○○	2347	LS02	S	0	LATIN CAPITAL LETTER S		3, 4, 5	083	53
B274	○● ○○ ●● ○○	34568	LS61	ß	0	LATIN SMALL LETTER SHARP S (German)		3 4, 5	223 225	DF E1
B036	○● ○○ ●● ○○	2345	LT01	t	0	LATIN SMALL LETTER T		3, 4, 5	116	74
B136	○● ○○ ●● ○○	23457	LT02	T	0	LATIN CAPITAL LETTER T		3, 4, 5	084	54
B217	●● ○● ○○ ○○	12348	LT63	þ	0	LATIN SMALL LETTER THORN (icelandic)		3 4	254 231	FE E7
B126	○○ ●● ○○ ○○	2357	LT64	þ	0	LATIN CAPITAL LETTER THORN (icelandic)		3 4	222 232	DE E8
B045	○○ ○○ ○○	136	LU01	u	0	LATIN SMALL LETTER U		3, 4, 5	117	75
B145	○○ ○○ ○○	1367	LU02	U	0	LATIN CAPITAL LETTER U		3, 4, 5	085	55
B261	○○ ○○ ○○ ○○	1568	LU11	ú	0	LATIN SMALL LETTER U WITH ACUTE		3 4, 5	250 163	FA A3
B242	○○ ●● ○○ ○○	268	LU12	Ú	0	LATIN CAPITAL LETTER U WITH ACUTE		3 4	218 233	DA E9
B276	○○ ●● ○○	234568	LU13	ù	0	LATIN SMALL LETTER U WITH GRAVE		3 4, 5	249 151	F9 97
B364	○○ ●● ○○	35678	LU14	Ù	0	LATIN CAPITAL LETTER U WITH GRAVE		3 5	217 235	D9 EB
B361	○○ ○○ ○○	15678	LU15	û	0	LATIN SMALL LETTER U WITH CIRCUMFLEX		3 4, 5	251 150	FB 96
B161	○○ ○○ ○○	1567	LU16	Û	0	LATIN CAPITAL LETTER U WITH CIRCUMFLEX		3 4	219 234	DB EA
B263	○○ ●● ○○	12568	LU17	ü	0	LATIN SMALL LETTER U WITH DIAERESIS		3 4, 5	252 129	FC 81
B246	○○ ●● ○○	2368	LU18	Ü	0	LATIN CAPITAL LETTER U WITH DIAERESIS		3 4, 5	220 154	DC 9A
B047	○○ ○○ ○○	1236	LV01	v	0	LATIN SMALL LETTER V		3, 4, 5	118	76
B147	○○ ○○ ○○	12367	LV02	V	0	LATIN CAPITAL LETTER V		3, 4, 5	086	56
B072	○○ ○○ ○○	2456	LW01	w	0	LATIN SMALL LETTER W		3, 4, 5	119	77
B172	○○ ○○ ○○	24567	LW02	W	0	LATIN CAPITAL LETTER W		3, 4, 5	087	57
B055	○○ ○○ ○○	1346	LX01	x	0	LATIN SMALL LETTER X		3, 4, 5	120	78
B155	○○ ○○ ○○	13467	LX02	X	0	LATIN CAPITAL LETTER X		3, 4, 5	088	58

Table 2 (continued)

Braille character		Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B075	•• ○ ○• ○○	13456	LY01	y	0	LATIN SMALL LETTER Y	3, 4, 5	121	79
B175	•• ○ ○• ○○	134567	LY02	Y	0	LATIN CAPITAL LETTER Y	3, 4, 5	089	59
B272	○• ○○ ○○	24568	LY11	ý	0	LATIN SMALL LETTER Y WITH ACUTE	3 4	253 236	FD EC
B264	○○ ○○• ○○	3568	LY12	Ý	0	LATIN CAPITAL LETTER Y WITH ACUTE	3 4	221 237	DD ED
B275	•• ○ ○• ○○	134568	LY17	ÿ	0	LATIN SMALL LETTER Y WITH DIAERESIS	3 4, 5	255 152	FF 98
B065	○○ ○○• ○○	1356	LZ01	z	0	LATIN SMALL LETTER Z	3, 4, 5	122	7A
B165	○○ ○○• ○○	13567	LZ02	Z	0	LATIN CAPITAL LETTER Z	3, 4, 5	090	5A
Greek alphabetic characters									
B201	•○ ○○ ○○	18	GA01	α	1	GREEK SMALL LETTER ALPHA	5	224	E0
B274	○○ ○○• ○○	34568	GB01	β	1	GREEK SMALL LETTER BETA	3 4, 5	223 225	DF E1
B222	○○ ○○• ○○	258	GG02	Γ	2	GREEK CAPITAL LETTER GAMMA	5	226	E2
B231	●● ○○ ○○	1458	GD01	δ	1	GREEK SMALL LETTER DELTA	5	235	EB
B221	●○ ○○ ○○	158	GE01	ε	1	GREEK SMALL LETTER EPSILON	5	238	EE
B262	○○ ○○• ○○	2568	GT62	Θ	1	GREEK CAPITAL LETTER THETA	5	233	E9
B215	●● ○○ ○○	1348	GM01	μ	1	GREEK SMALL LETTER MU	3 4, 5	181 230	B5 E6
B217	●● ○○ ○○	12348	GP01	π	1	GREEK SMALL LETTER PI	5	227	E3
B216	○○ ○○• ○○	2348	GS01	σ	1	GREEK SMALL LETTER SIGMA	5	229	E5
B124	○○ ○○• ○○	357	GS02	Σ	2	GREEK CAPITAL LETTER SIGMA	5	228	E4
B236	○○ ○○• ○○	23458	GT01	τ	1	GREEK SMALL LETTER TAU	5	231	E7
B213	○○ ○○• ○○	1248	GF01	φ	1	GREEK SMALL LETTER PHI	5	237	ED
B226	○○ ○○• ○○	2358	GF02	Φ	1	GREEK CAPITAL LETTER PHI	5	232	E8
B264	○○ ○○• ○○	3568	GO32	Ω	2	GREEK CAPITAL LETTER OMEGA	5	234	EA

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
Decimal digits										
B041	•○ ○○ ○● ○○	16	ND01	1	0	DIGIT ONE		3, 4, 5	049	31
B043	•○ ○○ ○● ○○	126	ND02	2	0	DIGIT TWO		3, 4, 5	050	32
B051	•○ ○○ ○● ○○	146	ND03	3	0	DIGIT THREE		3, 4, 5	051	33
B071	•○ ○○ ○● ○○	1456	ND04	4	0	DIGIT FOUR		3, 4, 5	052	34
B061	•○ ○○ ○● ○○	156	ND05	5	0	DIGIT FIVE		3, 4, 5	053	35
B053	•○ ○○ ○● ○○	1246	ND06	6	0	DIGIT SIX		3, 4, 5	054	36
B073	•○ ○○ ○● ○○	12456	ND07	7	0	DIGIT SEVEN		3, 5, 6	055	37
B063	•○ ○○ ○● ○○	1256	ND08	8	0	DIGIT EIGHT		3, 4, 5	056	38
B052	○○ ○● ○○ ○○	246	ND09	9	0	DIGIT NINE		3, 4, 5	057	39
B054	○○ ○● ○○ ○○	346	ND10	0	0	DIGIT ZERO		3, 4, 5	048	30
Currency signs										
B350	○○ ○● ○○ ○●	4678	SC01	¤	0	CURRENCY SIGN		3 4	164 207	A4 CF
B150	○○ ○○ ○● ●○	467	SC02	£	0	POUND SIGN		3 4, 5	163 156	A3 9C
B050	○○ ○○ ○○ ○○	46	SC03	\$	0	DOLLAR SIGN		3, 4, 5	036	24
B220	○○ ○● ○○ ○●	58	SC04	¢	0	CENT SIGN		3 4 5	162 189 155	A2 BD 9B
B250	○○ ○○ ○● ○●	468	SC05	¥	0	YEN SIGN		3 4 5	165 190 157	A5 BE 9D
B126	○○ ○● ○○ ○●	2357	SC06	₱	1	PESETA SIGN		5	158	9E
B353	○○ ○● ○○ ○●	124678	SC07	f	0	FLORIN SIGN		4, 5	159	9F
Punctuation marks										
B000	○○ ○○ ○○ ○○	—	SP01	SP	0	SPACE		3, 4, 5, 6	32	20

Table 2 (continued)

Braille character		Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B020	○○ ○● ○○ ○○	5	SP02	!	0	EXCLAMATION MARK	3, 4, 5	033	21
B144	○○ ○○ ●● ○○	367	SP03	i	0	INVERTED EXCLAMATION MARK	3 4, 5	161 173	A1 AD
B010	○● ○○ ○○ ○○	4	SP04	"	0	QUOTATION MARK	3, 4, 5	034	22
B040	○○ ○○ ●● ○○	6	SP05	'	0	APOSTROPHE	3, 4, 5	039	27
B046	○○ ○○ ●● ○○	236	SP06	(	0	LEFT PARANTHESIS	3, 4, 5	040	28
B064	○○ ○● ○○ ○○	356	SP07	)	0	RIGHT PARANTHESIS	3, 4, 5	041	29
B002	○○ ●● ○○ ○○	2	SP08	,	0	COMMA	3, 4, 5	044	2C
B170	○● ○○ ●● ○○	4567	SP09	-	0	LOW LINE; UNDERLINE	3, 4, 5	095	5F
B044	○○ ●● ○○	36	SP10	-	0 1	HYPHEN MINUS SIGN	3, 4, 5	045	2D
B004	○○ ○○ ●● ○○	3	SP11	.	0	FULL STOP	3, 4, 5	046	2E
B062	○○ ●● ○○ ○○	256	SP12	/	0	SOLIDUS; SLASH	3, 4, 5	047	2F
B022	○● ●● ○○ ○○	25	SP13	:	0	COLON	3, 4, 5	058	3A
B006	○○ ●● ○○ ○○	23	SP14	;	0	SEMICOLON	3, 4, 5	059	3B
B042	○○ ●● ○○ ○○	26	SP15	?	0	QUESTION MARK	3, 4, 5	063	3F
B204	○○ ○○ ●● ○○	38	SP16	¿	0	INVERTED QUESTION MARK	3 4, 5	191 168	BF A8
B360	○○ ○○ ●● ○○	5678	SP17	«	0	LEFT-POINTING DOUBLE ANGLE QUOTATION MARK	3 4, 5	171 174	AB AE
B330	○● ○○ ○○ ●●	4578	SP18	»	0	RIGHT-POINTING DOUBLE ANGLE QUOTATION MARK	3 4, 5	187 175	BB AF
B100	○○ ○○ ○○ ●●	7	SP30	NBSP	0	NO-BREAK SPACE	3 4	160 255	A0 FF
B244	○○ ○○ ●● ○○	368	SP32	SHY	0	SOFT HYPHEN	3 4	173 240	AD F0
B316	○● ○○ ○○ ●●	23478	SP33	!!	0	DOUBLE EXCLAMATION MARK	4, 5	019	13

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
Arithmetic signs										
B026	○○ ●● ○○	235	SA01	+	0	PLUS SIGN		3, 4, 5	043	2B
B326	○○ ●● ●●	23578	SA02	±	0	PLUS-MINUS SIGN		3 4, 5	177 241	BI F1
B060	○○ ●● ○○ ○○	56	SA03	<	0	LESS-THAN SIGN		3, 4, 5	060	3C
B066	○○ ●● ○○	2356	SA04	=	0	EQUALS SIGN		3, 4, 5	061	3D
B030	○○ ●● ○○ ○○	45	SA05	>	0	GREATER-THAN SIGN		3, 4, 5	062	3E
B363	●○ ○○ ●●	125678	SA06	÷	0	DIVISION SIGN		3 4, 5	247 246	F7 F6
B216	○● ●● ○●	2348	SA07	×	0	MULTIPLICATION SIGN		3 4	215 158	D7 9E
B320	○○ ●● ○○ ●●	578	SA38	∩	1	INTERSECTION SIGN		5	239	EF
B152	○● ●● ○● ●●	2467	SA45	∞	1	INFINITY SIGN		5	236	EC
B266	○○ ●● ○○	23568	SA48	≡	1	IS IDENTICAL TO SIGN		5	240	F0
B353	●● ○○ ●● ●●	124678	SA50	DCS	1	FUNCTION OF SIGN		4, 5	159	9F
B260	○○ ●● ○○ ●●	568	SA52	≤	1	LESS-THAN OR EQUALS SIGN		5	243	F3
B230	○● ●● ○○ ●●	458	SA53	≥	1	GREATER-THAN OR EQUALS SIGN		5	242	F2
B324	○○ ●● ○○ ●●	3578	SA70	≈	1	ALMOST EQUALS SIGN		5	247	F7
B151	●● ○○ ●● ●●	1467	SA80	√	1	RADICAL SIGN		5	251	FB
B222	○○ ●● ○○ ●●	258	SA91	Γ	1	GAMMA FUNCTION		5	226	E2
B124	○○ ●● ○○ ●●	357	SA93	Σ	1	SUMMATION SIGN		5	228	E4
Superscript digits										
B201	●○ ○○ ●● ○●	18	NS01	¹	0	SUPERSCRIPT ONE		3 4	185 251	B9 FB
B203	●○ ●● ○○ ●●	128	NS02	²	0	SUPERSCRIPT TWO		3 4, 5	178 253	B2 FD
B211	●● ○○ ●● ○○	148	NS03	³	0	SUPERSCRIPT THREE		3 4	179 252	B3 FC

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
Fractions										
B247	•○ ●○ ○○	12368	NF01	½	0	VULGAR FRACTION ONE-HALF		3 4, 5	189 171	BD AB
B245	•○ ○○ ●○	1368	NF04	¼	0	VULGAR FRACTION ONE-QUARTER		3 4, 5	188 172	BC AC
B255	●○ ○○ ●○	13468	NF05	¾	0	VULGAR FRACTION THREE QUARTERS		3 4	190 243	BE F3
Miscellaneous symbols										
B074	○● ○● ○○	3456	SM01	#	0	NUMBER SIGN		3, 4, 5	035	23
B077	●● ●● ○○	123456	SM02	%	0	PERCENT SIGN		3, 4, 5	037	25
B057	●● ●● ○○	12346	SM03	&	0	AMPERSAND		3, 4, 5	038	26
B024	○○ ○○ ●○ ○○	35	SM04	*	0	ASTERISK		3, 4, 5	042	2A
B134	○● ○● ●○ ○○	3457	SM05	@	0	COMMERCIAL AT		3, 4, 5	064	40
B167	●● ●● ●○	123567	SM06	[	0	LEFT SQUARE BRACKET		3, 4, 5	091	5B
B114	○○ ○○ ●○ ○○	347	SM07	\	0	REVERSE SOLIDUS; BACKSLASH		3, 4, 5	092	5C
B176	○○ ●● ○○	234567	SM08	]	0	RIGHT SQUARE BRACKET		3, 4, 5	093	5D
B213	●● ●● ○○ ○●	1248	SM10	=	0	DOUBLE UNDERLINE		4	242	F2
B067	●○ ●○ ○○	12356	SM11	{	0	LEFT CURLY BRACKET		3, 4, 5	123	7B
B140	○○ ○○ ●○ ○○	67	SM12	-	0	LONG HORIZONTAL LINE (connects on left and right)		4, 5	196	C4
B014	○● ○○ ●○ ○○	34	SM13	|	0	VERTICAL LINE		3, 4, 5	124	7C
B076	○○ ●● ○○	23456	SM14	}	0	RIGHT CURLY BRACKET		3, 4, 5	125	7D
B215	●● ●● ○○ ○●	1348	SM17	μ	0	MICRO SIGN		3 4, 5	181 230	B5 E6
B264	○○ ○○ ●○ ○○	3568	SM18	Ω	1	OHM SIGN		5	234	EA
B270	○● ○○ ●○ ○○	4568	SM19	°	0	DEGREE SIGN		3 4, 5	176 248	B0 F8
B232	○● ○● ○○ ○●	2458	SM20	º	0	MASCULINE ORDINAL INDICATOR		3 4, 5	186 167	BA A7

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B223		1258	SM21	ª	0	FEMININE ORDINAL INDICATOR		3 4, 5	170 166	AA A6
			SM22	ª	1	SUPERSCRIPT LATIN SMALL LETTER N		5	252	FC
B124		357	SM24	§	0	SECTION SIGN; PARAGRAPH SIGN		3 4	167 245	A7 F5
B231		1458	SM25	¶	0	PILCROW SIGN		3 4, 5 4	182 020 244	B6 14 F4
B104		37	SM26	.	0	MIDDLE DOT; MULTIPLICATION DOT		3 4, 5	183 250	B7 FA
B305		1378	SM28	♂	0	MALE SYMBOL		4, 5	011	0B
B307		12378	SM29	♀	0	FEMALE SYMBOL		4, 5	012	0C
B367		1235678	SM30	←	0	LEFTWARDS ARROW		4, 5	027	1B
B365		135678	SM31	→	0	RIGHTWARDS ARROW		4, 5	026	1A
B355		134678	SM32	↑	0	UPWARDS POINTING ARROW		4, 5	024	18
B375		1345678	SM33	↓	0	DOWNWARDS ARROW		4, 5	025	19
B237		123458	SM47	■	0	FULL SMALL SQUARE		4, 5	254	FE
B257		123468	SM52	©	0	COPYRIGHT SIGN		3 4	169 184	A9 B8
B227		12358	SM53	®	0	REGISTERED SIGN		3 4	174 169	AE A9
B333		124578	SM57	•	0	FULL CIRCLE BULLET		4, 5	007	07
B323		12578	SM58	▪	0	INVERSE CIRCLE BULLET		4, 5	008	08
B317		123478	SM59	►	0	BLACK RIGHT-POINTING TRIANGLE		4, 5	016	10
B356		234678	SM60	▲	1	BLACK UP-POINTING TRIANGLE		4, 5	30	1E
B370		45678	SM62	▼	0	BLACK DOWN-POINTING TRIANGLE		4, 5	031	1F
B337		1234578	SM63	◀	0	BLACK LEFT-POINTING TRIANGLE		4, 5	017	11
B221		158	SM65	⋮	0	BROKEN BAR		3 4	166 221	A6 DD
B362		25678	SM66	⊍	0	NOT SIGN		3 4, 5	172 170	AC AA

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B171	•• ○○ ●●	14567	SM68	¬	1	INVERTED NOT SIGN		5	169	A9
B325	•○ ○○ ●●	13578	SM69	⊛	0	RADIANT SUN		4, 5	015	0F
B347	•○ ○○ ●●	123678	SM70	—	0	FULL RECTANGLE		4, 5	022	16
B314	○○ ○○○ ●●	3478	SM71	↶	1	ROTATED NOT SIGN		4, 5	28	1C
B332	○○ ○○○ ●●	24578	SM74	○	0	INVERSE MEDIUM CIRCLE		4, 5	010	0A
B312	○○ ○○○ ●●	2478	SM75	○	0	MEDIUM CIRCLE		4, 5	009	09
B327	○○ ○○○ ●●	123578	SM76	↑↓	0	UP AND DOWN POINTING ARROW		4, 5	018	12
B372	○○ ○○○ ●●	245678	SM77	↑↓	0	UPWARDS AND DOWNWARDS ARROW WITH UNDERBAR		4, 5	023	17
B376	○○ ○○○ ●●	2345678	SM78	↔	1	LEFT AND RIGHT POINTING ARROW		4, 5	29	17
B070	○○ ○○○ ○○	456	SM79	⌂	0	HOUSE SYMBOL		4, 5	127	7F
B335	●● ○○○ ●●	134578	SM91	♪	0	DOUBLE MUSIC NOTE		4, 5	014	0E
B315	●● ○○○ ●●	13478	SM93	♪	0	MUSIC NOTE		4, 5	013	0D
Diacritical marks as separate graphic characters										
B260	○○ ○○○ ●●	568	SD11	'	0	ACUTE ACCENT		3 4	180 239	B4 EF
B034	○○ ○○○ ●●○○	345	SD13	`	0	GRAVE ACCENT		3, 4, 5	096	60
B156	○○ ○○○ ●●	23467	SD15	^	0	CIRCUMFLEX ACCENT		3, 4, 5	094	5E
B210	○○ ○○○ ●●	48	SD17	..	0	DIAERESIS		3 4	168 249	A8 F9
B056	○○ ○○○ ●●○○	2346	SD19	~	0	TILDE		3, 4, 5	126	7E
B210	○○ ○○○ ●●○○	48	SD28	•	1	FULL RING ABOVE		5	249	F9
B230	○○ ○○○ ●●○○	458	SD31	—	0	MACRON		3 4	175 238	AF EE
B240	○○ ○○○ ●●○○	68	SD41	„	0	CEDILLA		3 4	184 247	B8 F7

Table 2 (continued)

Table 2 (continued)

Braille character		Meaning (assigned graphic or control character)					8-bit code			
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B342	○○ ●● ○● ●○	2678	SF26	■	0	BOX DRAWINGS HEAVY UP AND LEFT		4, 5	188	BC
B350	○○ ○○ ●●	4678	SF27	■	1	BOX DRAWINGS UP HEAVY AND LEFT LIGHT		5	189	BD
B354	○● ●● ○● ●○	34678	SF28	■	1	BOX DRAWINGS UP LIGHT AND LEFT HEAVY		5	190	BE
B240	○○ ○○○ ○● ●○	68	SF36	■	1	BOX DRAWINGS VERTICAL LIGHT AND RIGHT HEAVY		5	198	C6
B142	○○ ●● ○● ●○	267	SF37	■	1	BOX DRAWINGS VERTICAL HEAVY AND RIGHT LIGHT		5	199	C7
B306	○○ ●● ○● ●○	2378	SF38	■	0	BOX DRAWINGS HEAVY UP AND RIGHT		4, 5	200	C8
B166	○○ ●● ●○ ○○	23567	SF39	■	0	BOX DRAWINGS HEAVY DOWN AND RIGHT		4, 5	201	C9
B200	○○ ○○○ ○● ●○	8	SF40	■	0	BOX DRAWINGS HEAVY UP AND HORIZONTAL		4, 5	202	CA
B206	○○ ●● ○● ●○	238	SF41	■	0	BOX DRAWINGS HEAVY DOWN AND HORIZONTAL		4, 5	203	CB
B207	●○ ●● ●○ ○●	1238	SF42	■	0	BOX DRAWINGS HEAVY VERTICAL AND RIGHT		4, 5	204	CC
B322	○○ ●● ○● ●○	2578	SF43	—	0	BOX DRAWINGS HEAVY HORIZONTAL		4, 5	205	CD
B373	●● ●○ ○● ●○	1245678	SF44	+	0	BOX DRAWINGS HEAVY VERTICAL AND HORIZONTAL		4, 5	206	CE
B141	●○ ●● ●○ ○●	167	SF45	■	1	BOX DRAWINGS DOWN LIGHT AND HORIZONTAL HEAVY		5	207	CF
B120	○○ ●● ○● ●○	57	SF46	■	1	BOX DRAWINGS UP HEAVY AND HORIZONTAL LIGHT		5	208	D0
B154	○● ●● ○● ●○	3467	SF47	■	1	BOX DRAWINGS DOWN LIGHT AND HORIZONTAL HEAVY		5	209	D1
B202	○○ ●● ○● ●○	28	SF48	■	1	BOX DRAWINGS DOWN HEAVY AND HORIZONTAL LIGHT		5	210	D2
B352	○○ ●● ○● ●○	24678	SF49	■	1	BOX DRAWINGS UP HEAVY AND RIGHT LIGHT		5	211	D3
B212	○○ ●● ○● ●○	248	SF50	■	1	BOX DRAWINGS UP LIGHT AND RIGHT HEAVY		5	212	D4
B257	●● ●○ ○● ●○	123468	SF51	■	1	BOX DRAWINGS DOWN LIGHT AND RIGHT HEAVY		5	213	D5
B225	●○ ●● ●○ ○●	1358	SF52	■	1	BOX DRAWINGS DOWN HEAVY AND RIGHT LIGHT		5	214	D6
B227	●○ ●● ●○ ○●	12567	SF53	■	1	BOX DRAWINGS VERTICAL HEAVY AND HORIZONTAL LIGHT		5	215	D7
B164	○○ ●● ○● ●○	3567	SF54	■	1	BOX DRAWINGS VERTICAL LIGHT AND HORIZONTAL HEAVY		5	216	D8

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B163	•○ ○○ ○○ ○○	12567	SF57	■	0	LOWER HALF BLOCK		4, 5	220	DC
B346	○○ ○○ ○○ ○○	23678	SF58	|	1	LEFT HALF BLOCK		6	221	DD
B364	○○ ○○ ○○ ○○	35678	SF59	||	1	RIGHT HALF BLOCK		6	222	DE
B173	●○ ●○ ○○ ○○	124567	SF60	■	0	UPPER HALF BLOCK		4, 5	223	DF
B377	●● ●● ●●	12345678	SF61	■■	0	FULL BLOCK		4, 5	219	DB
						Other pictorial characters				
B301	●○ ○○ ○○ ○○	178	SS00	☺	0	SMILING FACE WHITE		4, 5	001	01
B303	●○ ○○ ○○ ○○	1278	SS01	☻	0	SMILING FACE BLACK		4, 5	002	A2
B311	●○ ○○ ○○ ○○	1478	SS02	♥	0	HEART SYMBOL		4, 5	003	03
B331	●○ ○○ ○○ ○○	14578	SS03	♦	0	DIAMOND SYMBOL		4, 5	004	04
B321	●○ ○○ ○○ ○○	1578	SS04	♣	0	CLUB SYMBOL		4, 5	005	05
B313	●○ ○○ ○○ ○○	12478	SS05	♠	0	SPADE SYMBOL		4, 5	006	06
B143	●○ ○○ ○○ ○○	1267	SS26	∫	1	BIG INTEGRAL SIGN UPPER HALF		5	244	F4
B161	●○ ○○ ○○ ○○	1567	SS27	J	1	BIG INTEGRAL SIGN LOWER HALF		5	245	F5
						Shift marks				
B356	○○ ○○ ○○	234678	-	SM1	0	SHIFT MARK ONE (not assigned to any graphic or control character)		3, 4, 5	030	1E
B376	○○ ○○ ○○	2345678	-	SM2	0	SHIFT MARK TWO (not assigned to any graphic or control character)		3, 4, 5	029	1D
B314	○○ ○○ ○○	3478	-	SM3	0	SHIFT MARK THREE (not assigned to any graphic or control character)		3, 4, 5	028	1C
						Other Braille characters				
B377	●● ●● ●●	12345678	-		3	8-DOT CURSOR (not assigned to any graphic or control character)		4, 5	219	DB
B100	○○ ○○ ○○ ●○	7	-		1	END SIGN (not assigned to any graphic or control character)		5	255	FF
B270	○○ ○○ ○○ ○○	4568	-		1	4-DOT BRAILLE ORIENTATION MARK (not assigned to any graphic or control character)		3 4, 5	176 248	B0 F8

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)				8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name	Code table	Dez.	Hex
B377		12345678		-	2	8-DOT BRAILLE ORIENTATION MARK (not assigned to any graphic or control character)	4, 5	219	DB
Control Characters									
B313		12478		ACK	1	CONTROL CHARACTER ACK: ACKNOWLEDGE	3	006	06
B333		124578	-	BEL	1	CONTROL CHARACTER BEL: BELL	3	007	07
B323		12578	-	BS	1	CONTROL CHARACTER BS: BACKSPACE	3	008	08
B355		134678	-	CAN	1	CONTROL CHARACTER CAN: CANCEL	3	024	18
B315		13478	-	CR	1	CONTROL CHARACTER CR: CARRIAGE RETURN	3	013	0D
B337		1234578	-	DC1	1	CONTROL CHARACTER DC1: DEVICE CONTROL ONE	3	017	11
B327		123578		DC2	1	CONTROL CHARACTER DC2: DEVICE CONTROL TWO	3	018	12
B316		23478	-	DC3	1	CONTROL CHARACTER DC3: DEVICE CONTROL THREE	3	019	13
B336		234578	-	DC4	0	CONTROL CHARACTER DC4: DEVICE CONTROL FOUR	3	020	14
B070		456	-	DEL	1	CONTROL CHARACTER DEL: DELETE	3	127	7F
B317		123478	-	DLE	1	CONTROL CHARACTER DLE: DATA LINK ESCAPE	3	016	10
B375		1345678	-	EM	1	CONTROL CHARACTER EM: END OF MEDIUM	3	025	19
B321		1578	-	ENQ	1	CONTROL CHARACTER ENQ: ENQUIRY	3	005	05
B331		1235678		EOT	1	CONTROL CHARACTER EOT: END OF TRANSMISSION	3	004	04
B367		245678	-	ESC	1	CONTROL CHARACTER ESC: ESCAPE	3	027	1B
B372		1478	-	ETB	1	CONTROL CHARACTER ETB: END OF TRANSMISSION BLOCK	3	023	17
B311		12378		ETX	1	CONTROL CHARACTER ETX: END OF TEXT	3	003	03
B307		3478		FF	1	CONTROL CHARACTER FF: FORM FEED	3	012	0C
B314		12378	-	FS	3	CONTROL CHARACTER FS: FILE SEPARATOR	3	028	1C
B376		3478	-	GS	3	CONTROL CHARACTER GS: GROUP SEPARATOR	3	029	1D

Table 2 (continued)

Braille character			Meaning (assigned graphic or control character)					8-bit code		
Identifier	Braille pattern	Dots	Identifier	Graph. symbol or acronym	Rank	Name		Code table	Dez.	Hex
B312	○● ●○ ○○ ●●	2478		HT	1	CONTROL CHARACTER HT: CHARACTER TABULATION		3	009	09
B370	○● ●○ ○○ ●●	45678	-	IS1	1	CONTROL CHARACTER IS1: INFORMATION SEPARATOR ONE		3	031	1F
B356	○● ●○ ○○ ●●	234678	-	IS2	2	CONTROL CHARACTER IS2: INFORMATION SEPARATOR TWO		3	030	1E
B376	○● ●○ ○○ ●●	2345678	-	IS3	2	CONTROL CHARACTER IS3: INFORMATION SEPARATOR THREE		3	029	1D
B314	○● ●○ ○○ ●●	3478	-	IS4	2	CONTROL CHARACTER IS4: INFORMATION SEPARATOR FOUR		3	028	1C
B332	○● ●○ ○○ ●●	24578	-	LF	1	CONTROL CHARACTER LF: LINE FEED		3	010	0A
B335	●● ○○ ●●	134578	-	LS0	2	CONTROL CHARACTER LSO: LOCKING SHIFT ZERO		3	014	0E
B325	●○ ○○ ●○	13578	-	LS1	2	CONTROL CHARACTER LS1: LOCKING SHIFT ONE		3	015	0F
B345	●○ ○○ ●○	13678	-	NAK	1	CONTROL CHARACTER NAK: NEGATIVE ACKNOWLEDGE		3	021	15
B334	○● ●○ ○○ ●●	34578		NUL	0	CONTROL CHARACTER NUL: NULL		3	000	00
B356	○● ●○ ○○ ●●	234678	-	RS	3	CONTROL CHARACTER RS: RECORD SEPARATOR		3	030	1E
B325	●○ ○○ ●○	13578	-	SI	1	CONTROL CHARACTER SI: SHIFT IN		3	015	0F
B335	●● ○○ ●●	134578	-	SO	1	CONTROL CHARACTER SO: SHIFT-OUT		3	014	0E
B301	●○ ○○ ●○ ○○ ●●	178	-	SOH	1	CONTROL CHARACTER SOH: START OF HEADING		3	001	01
B303	●○ ○○ ●○ ○○ ●●	1278	-	STX	1	CONTROL CHARACTER STX: START OF TEXT		3	002	02
B365	●○ ○○ ●○	135678	-	SUB	1	CONTROL CHARACTER SUB: SUBSTITUTE		3	026	1A
B347	●○ ○○ ●○	123678		SYN	1	CONTROL CHARACTER SYN: SYNCHRONOUS IDLE		3	022	16
B370	○● ●○ ○○ ●●	45678	-	US	2	CONTROL CHARACTER US: UNIT SEPARATOR		3	031	1F
B305	●○ ○○ ●○ ○○ ●●	1378		VT	1	CONTROL CHARACTER VT: LINE TABULATION		3	011	0B

6 Table 3: Braille patterns — Code tables

The coding of the 8-dot Braille characters for communication and data processing purposes follows as closely as possible the coding of the Latin alphabet No. 1 according to ISO/IEC 8859-1:1998. Table 3 contains the complete Braille equivalent to this Technical Report. The control characters, in accordance with ISO/IEC 646, ISO/IEC 6429, ISO/IEC 4873 (especially to be used with ISO/IEC 10367) and ISO/IEC 10646-1 have also been added in the interest of presenting a complete set of all 256 8-dot Braille characters.

Table 3 — Coding of Braille characters

H HEX		FIRST HALF BYTE																
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
S E C O N D H A L F B Y T E	0	NUL	DLE	SP01 B000	ND10 B054	SM05 B134	LP02 B117	SD13 B034	LP01 B017	PAD	DCS	SP30 B100	NB SP B270	SM19 B346	LA14 B346	LD62 B346	LA13 B267	LD63 B236
	1	SOH	DC1	SP02 B020	ND01 B041	LA02 B101	LQ02 B137	LA01 B001	LQ01 B037	HOP	PU1	SP03 B144	SA02 B326	LA12 B202	LN20 B162	LA11 B241	LN19 B235	
	2	STX	DC2	SP04 B010	ND02 B043	LB02 B103	LR02 B127	LB01 B003	LR01 B027	BPH	PU2	SC04 B220	NS02 B203	LA16 B141	LO14 B320	LA15 B341	LO13 B254	
	3	ETX	DC3	SM01 B074	ND03 B051	LC02 B111	LS02 B116	LC01 B011	LS01 B016	NBH	STS	SC02 B150	NS03 B211	LA20 B154	LO12 B262	LA19 B354	LO11 B271	
	4	EOT	DC4	SC03 B050	ND04 B071	LD02 B131	LT02 B136	LD01 B031	LT01 B036	IND	CCH	SC01 B350	SD11 B260	LA18 B160	LO16 B171	LA17 B234	LO15 B371	
	5	ENQ	NAK	SM02 B077	ND05 B061	LE02 B121	LU02 B145	LE01 B021	LU01 B045	NEL	MW	SC05 B250	SM17 B215	LA28 B174	LO20 B142	LA27 B374	LO19 B225	
	6	ACK	SYN	SM03 B057	ND06 B053	LF02 B113	LV02 B147	LF01 B013	LV01 B047	SSA	SPA	SM65 B221	SM25 B231	LA52 B110	LO18 B224	LA51 B310	LO17 B252	
	7	BEL	ETB	SP05 B040	ND07 B073	LG02 B133	LW02 B172	LG01 B033	LW01 B072	ESA	EPA	SM24 B124	SM26 B104	LC42 B157	SA07 B216	LC41 B357	SA06 B363	
	8	BS	CAN	SP06 B046	ND08 B063	LH02 B123	LX02 B155	LH01 B023	LX01 B055	HTS	SOS	SD17 B210	SD41 B240	LE14 B324	LO62 B152	LE13 B256	LO61 B352	
	9	HT	EM	SP07 B064	ND09 B052	LI02 B112	LY02 B175	LI01 B012	LY01 B075	HTJ	SGCI	SM52 B257	NS01 B201	LE12 B177	LU14 B364	LE11 B256	LU13 B276	
	A	LF	SUB	SM04 B024	SP13 B022	LJ02 B132	LZ02 B165	LJ01 B032	LZ01 B065	VTS	SCI	SM21 B223	SM20 B232	LE16 B143	LU12 B242	LE15 B343	LU11 B261	
	B	VT	ESC	SA01 B026	SP14 B006	LK02 B105	SM06 B167	LK01 B005	SM11 B067	PLD	CSI	SP17 B223	SP18 B330	LE18 B226	LU16 B161	LE17 B253	LU15 B361	
	C	FF	IS4 FS	SM3 B002	SA03 B060	LL02 B107	SM07 B114	LL01 B007	SM13 B014	PLU	ST	SM66 B362	NF04 B245	LI14 B120	LU18 B246	LI13 B214	LU17 B263	
	D	CR	IS3 GS	SM2 B044	SA04 B066	LM02 B115	SM08 B176	LM01 B015	SM14 B076	RI	OSC	SP32 B244	NF01 B247	LI12 B222	LY12 B264	LI11 B251	LY11 B272	
	E	SO LSO	IS2 RS	SM1 B004	SA05 B030	LN02 B135	SD15 B156	LN01 B035	SD19 B056	SS2	PM	SM53 B227	NF05 B255	LI16 B151	LT64 B126	LI15 B351	LT63 B217	
	F	SI LS1	IS1 US	SP12 B062	SP15 B042	LO02 B125	SP09 B170	LO01 B025	DEL	SS3	APC	SD31 B230	SP16 B204	LI18 B266	LS61 B274	LI17 B273	LY17 B275	

Annex A

Braille patterns — Code tables PC1 (850) and PC2 (437)

Taking into account the existing conventions and availability of technical equipment it is convenient to additionally assign the Braille characters to two 8-bit code tables which are in common use on personal computers.

Table A.1 — 8-bit code table PC1 (850)

H HEX		FIRST HALF BYTE															
		0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F
S E C O N D H A L F B Y T E	0	SM59 B334	SP01 B000	ND10 B054	SM05 B134	LP02 B117	SD13 B034	LP01 B017	LC42 B157	LE12 B177	LA11 B241	SF14 B300	SF02 B304	LD63 B236	LO12 B262	SP32 B244	
	1	SS00 B301	SM63 B337	SP02 B020	ND01 B041	LA02 B101	LQ02 B137	LA01 B001	LQ01 B037	LU17 B263	LA51 B310	LI11 B251	SF15 B344	SF07 B102	LD62 B164	LS61 B274	SA02 B326
	2	SS01 B303	SM76 B327	SP04 B010	ND02 B043	LB02 B103	LR02 B127	LB01 B003	LR01 B027	LE11 B277	LA52 B110	LO11 B271	SF16 B366	SF06 B205	LE16 B143	LO16 B171	SM10 B213
	3	SS02 B311	SP33 B316	SM01 B074	ND03 B051	LC02 B111	LS02 B116	LC01 B011	LS01 B016	LA15 B341	LO15 B371	LU11 B261	SF11 B106	SF08 B146	LE18 B226	LO14 B320	NF05 B255
	4	SS03 B331	SM25 B336	SC03 B050	ND04 B071	LD02 B131	LT02 B136	LD01 B031	LT01 B036	LA17 B234	LO17 B252	LN19 B235	SF09 B265	SM12/SF10 B140	LE14 B324	LO19 B225	SM25 B231
	5	SS04 B321	SM24 B345	SM02 B077	ND05 B061	LE02 B121	LU02 B145	LE01 B021	LU01 B045	LA13 B267	LO13 B254	LN20 B162	SF05 B202	LI61 B153	LO20 B212	SM24 B124	
	6	SS05 B313	SM70 B347	SM03 B057	ND06 B053	LF02 B113	LV02 B147	LF01 B013	LV01 B047	LA27 B374	LU15 B361	SM21 B223	LA16 B141	LA19 B354	LI12 B222	SM17 B215	SA06 B363
	7	SM57 B333	SM77 B372	SP05 B040	ND07 B073	LG02 B133	LW02 B172	LG01 B033	LW01 B072	LC41 B357	LU13 B276	SM20 B232	LA14 B346	LA20 B154	LI16 B151	LT63 B217	SD41 B240
	8	SM58 B323	SM32 B355	SP06 B046	ND08 B063	LH02 B123	LX02 B155	LH01 B023	LX01 B055	LA27 B343	LU15 B275	SP16 B204	SM52 B257	SF38 B306	LI18 B266	LT64 B126	SM19 B270
	9	SM75 B312	SM33 B375	SP07 B064	ND09 B052	LI02 B112	LY02 B175	LI01 B012	LY01 B075	LE17 B253	LO18 B224	SM53 B227	SF23 B130	SF39 B166	SF04 B340	LU12 B242	SD17 B210
S E C O N D H A L F B Y T E	A	SM74 B332	SM31 B365	SM04 B024	SP13 B022	LJ02 B132	LZ02 B165	LJ01 B032	LZ01 B065	LE13 B256	LU18 B246	SM66 B362	SF24 B243	SF40 B200	SF01 B122	LU16 B161	SM26 B104
	B	SM28 B305	SM30 B367	SA01 B026	SP14 B006	LK02 B105	SM06 B167	LK01 B005	SM11 B067	LI17 B273	LO61 B352	NF01 B247	SF25 B233	SF41 B206	SF61 B377	LU14 B364	NS01 B201
	C	SM29 B307	SM71 B314	SP08 B003	SA03 B060	LL02 B107	SM07 B114	LL01 B007	SM13 B014	LI15 B351	SC02 B150	NF04 B245	SF26 B342	SF42 B207	SF57 B163	LY11 B272	NS03 B211
	D	SM93 B315	SM78 B376	SP10 B044	SA04 B066	LM02 B115	SM08 B176	LM01 B015	SM14 B076	LI13 B214	LO62 B152	SP03 B144	SC04 B220	SF43 B322	SM65 B221	LY12 B264	NS02 B203
	E	SM91 B335	SM60 B356	SP11 B004	SA05 B030	LN02 B135	SD15 B156	LN01 B035	SD19 B056	LA18 B160	SA07 B216	SP17 B360	SC05 B250	SF44 B373	LI14 B120	SD31 B237	SM47 B237
	F	SM69 B325	SM62 B370	SP12 B062	SP15 B042	LO02 B125	SP09 B170	LO01 B025	SM79 B070	LA28 B174	SC07 B353	SP18 B330	SF03 B302	SC01 B350	SF60 B173	SD11 B260	SP30 B100

Table A.2 — 8-bit code table PC2 (437)

H HEX	FIRST HALF BYTE																
	0	1	2	3	4	5	6	7	8	9	A	B	C	D	E	F	
S E C O N D H A L F B Y T E	0	SM59 B334	SP01 B317	ND10 B000	SM05 B054	LP02 B134	SD13 B117	LP01 B034	LC42 B017	LE12 B157	LA11 B177	SF14 B241	SF02 B300	SF46 B120	GA01 B201	SA48 B266	
	1	SS00 B301	SM63 B337	SP02 B020	ND01 B041	LA02 B101	LQ02 B137	LA01 B001	LQ01 B037	LU17 B263	LA51 B310	LI11 B251	SF15 B344	SF07 B102	SF47 B154	LS61/GB01 B274	SA02 B326
	2	SS01 B303	SM76 B327	SP04 B010	ND02 B043	LB02 B103	LR02 B127	LB01 B003	LR01 B027	LE11 B277	LA52 B110	LO11 B271	SF16 B366	SF06 B205	SF48 B202	SA91/GG02 B222	SA53 B230
	3	SS02 B311	SP33 B316	SM01 B074	ND03 B051	LC02 B111	LS02 B116	LC01 B011	LS01 B016	LA15 B341	LO15 B371	LU11 B261	SF11 B106	SF08 B146	SF49 B352	GP01 B217	SA52 B260
	4	SS03 B331	SM25 B336	SC03 B050	ND04 B071	LD02 B131	LT02 B136	LD01 B031	LT01 B036	LA17 B234	LO17 B252	LN19 B235	SF09 B265	SF50 B140	SF50 B212	SM12/SF10 B124	SS26 B143
	5	SS04 B321	SM24 B345	SM02 B077	ND05 B061	LE02 B121	LU02 B145	LE01 B021	LU01 B045	LA13 B267	LO13 B254	LN20 B162	SF19 B242	SF05 B153	SF51 B257	GS01 B216	SS27 B161
	6	SS05 B313	SM70 B347	SM03 B057	ND06 B053	LF02 B113	LV02 B147	LF01 B013	LV01 B047	LA27 B374	LU15 B361	SM21 B223	SF20 B272	SF36 B240	SF52 B225	SM17/GM01 B215	SA06 B363
	7	SM57 B333	SM77 B372	SP05 B040	ND07 B073	LG02 B133	LW02 B172	LG01 B033	LW01 B072	LC41 B357	LU13 B276	SM20 B232	SF21 B244	SF37 B142	SF53 B227	GT01 B236	SA70 B324
	8	SM58 B323	SM32 B355	SP06 B046	ND08 B063	LH02 B123	LX02 B155	LH01 B023	LX01 B055	LE15 B343	LY17 B275	SP16 B204	SF22 B211	SF38 B306	SF54 B164	GF02 B226	SM19 B270
	9	SM75 B312	SM33 B375	SP07 B064	ND09 B052	LI02 B112	LY02 B175	LI01 B012	LY01 B075	LE17 B253	LO18 B224	SM68 B171	SF23 B130	SF39 B166	SF04 B340	GT62 B262	SD28 B210
A B C D E F	A	SM74 B332	SM31 B365	SM04 B024	SP13 B022	LJ02 B132	LZ02 B165	LJ01 B032	LZ01 B065	LE13 B256	LU18 B246	SM66 B362	SF24 B243	SF40 B200	SF01 B122	SM18/GO32 B264	SM26 B104
	B	SM28 B305	SM30 B367	SA01 B026	SP14 B006	LK02 B105	SM06 B167	LK01 B005	SM11 B067	LI17 B273	SC04 B220	NF01 B247	SF25 B233	SF41 B206	SF61 B377	GD01 B231	SA80 B151
	C	SM29 B307	SM71 B314	SP08 B002	SA03 B060	LL02 B107	SM07 B114	LL01 B007	SM13 B014	LI15 B351	SC02 B150	NF04 B245	SF26 B342	SF42 B207	SF57 B163	SA45 B152	SM22 B255
	D	SM93 B315	SM78 B376	SP10 B044	SA04 B066	LM02 B115	SM08 B176	LM01 B015	SM14 B076	LI13 B214	SC05 B250	SP03 B144	SF27 B350	SF43 B322	SF58 B346	GF01 B213	NS02 B203
	E	SM91 B335	SM60 B356	SP11 B004	SA05 B030	LN02 B135	SD15 B156	LN01 B035	SD19 B056	LA18 B070	SC06 B160	SP17 B126	SF28 B360	SF44 B354	SF59 B373	GE01 B364	SM47 B221
	F	SM69 B325	SM62 B370	SP12 B062	SP15 B042	LO02 B125	SP09 B170	LO01 B025	SM79 B070	LA28 B174	SC07 B353	SP18 B330	SF03 B302	SF45 B141	SF60 B173	SA38 B320	SM47 B100

Bibliography

- [1] ISO/IEC 646:1991, *Information technology — ISO 7-bit coded character set for information interchange*
- [2] ISO/IEC 2022:1994, *Information technology — Character code structure and extension techniques*
- [3] ISO/IEC 4873:1991, *Information technology — ISO 8-bit code for information interchange — Structure and rules for implementation*
- [4] ISO/IEC 6429:1992, *Information technology — Control functions for coded character sets*
- [5] ISO/IEC 8859-1:1998, *Information technology — 8-bit single-byte coded graphic character sets — Part 1: Latin alphabet No. 1*
- [6] ISO/IEC 10367:1991, *Information technology — Standardized coded graphic character sets for use in 8-bit codes*
- [7] ISO/IEC 10646-1:2000, *Information technology — Universal Multiple-Octet Coded Character Set (UCS) — Part 1: Architecture and Basic Multilingual Plane*
- [8] ISO/TR 11548-1:2001, *Communication aids for blind persons — Identifiers, names and assignation to coded character sets for 8-dot Braille characters — Part 1: General guidelines for Braille identifiers and shift marks*

ISO/IEC JTC 1/SC 22/WG 1

ICS 11.180.30

Price based on 42 pages

© ISO 2001 – All rights reserved