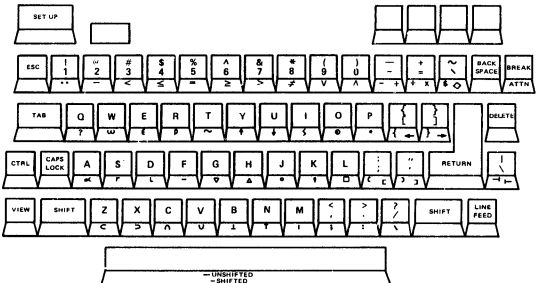


**DEC STD**  
**107**  
**SEC. 0**  
**REV. B**



MA-3359

Figure 4. APL Character Set Keyboard

## 5.2 KATAKANA PRINTER KEYBOARDS

The katakana printer keyboard is used in Japan. The keyboard provides a set of Japanese characters that relate to equivalent English characters on the keyboard.

Figure 17 shows the katakana keyboard that was designed for use with the LA36 DECwriter Terminal. This katakana keyboard is now obsolete.

Figure 18 shows the katakana keyboard that is currently used with the LA34 DECwriter Terminal. This keyboard design was released for production in April, 1979.

The standard U.S. keyboard mode yields the codes specified in Figure 2, which shows the Digital Standard Keyboard code. The codes generated in the katakana mode are shown in Figure 19.

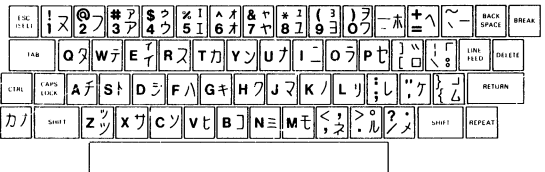
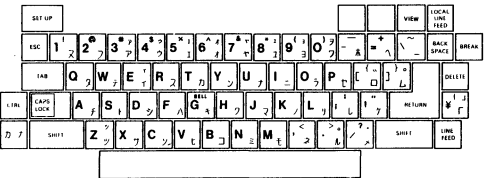


Figure 17. LA36 Printer Katakana Keyboard (Obsolete)



## LEGEND

ALPHANUMERIC  
MODE

3  $\frac{\text{ア}}{\text{3}}$  KANA  
MODE

7  $\frac{\text{ア}}{\text{7}}$  SHIFTED  
NORMAL

カ  $\frac{\text{カ}}{\text{カ}}$  DENOTES KATAKANA  
SELECT KEY. NOT A  
CODE GENERATING KEY

DMA 8872

Figure 18. LA34 Printer Katakana Keyboard Introduced April, 1979

digital

IN 0106/ATA 16 R11/1/2271  
DMA 118A

WA 2222

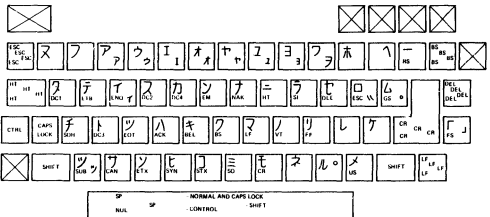


Figure 19. LA34 Katakana Keyboard Code

Escape sequences listed in the following chart are specified in terms of DEC STD 051 graphics, as well as octal representations.

Name	Escape Sequences		Notes
	G0	G1	
Great Britain	ESC ( A 033 050 101	ESC ) A 033 051 101	
United States	ESC ( B 033 050 102	ESC ) B 033 051 102	
Finland	ESC ( 5 033 050 065	ESC ) 5 033 051 065	1,2
Norway and Denmark	ESC ( 6 033 050 067	ESC ) 6 033 051 066	1,3
Sweden	ESC ( 7 033 050 067	ESC ) 7 033 051 067	1,4
Germany	ESC ( K 033 050 113	ESC ) K 033 051 113	
France	ESC ( R 033 050 113	ESC ) R 033 051 122	
Canada (French)	ESC ( 9 033 050 071	ESC ) 9 033 051 071	1,5,6
Japan (Roman)	ESC ( J 033 050 112	ESC ) J 033 051 112	
Japan (Katakana)	ESC ( I 033 050 102	ESC ) I 033 051 102	
APL	ESC ( 8 033 050 070	ESC ) 8 033 051 070	7

**Notes:**

1. These character sets are different from the registered ISO character sets. Details of the differences are listed under subhead 4. Private escape sequences have been assigned to these character sets. If a designated escape sequence is not implemented by a terminal, it is acceptable for the terminal to designate a "closest fit" character set as a fall-back.

**CAUTION**

Character sets implemented as "closest fit" are subject to change. In all cases, the private escape sequence listed in the table is recommended.

2. This character set should be designated as a "closest fit" if the final character "C" (103) is used.
3. This character set should be designated as a "closest fit" if the final character "E" (105) is used.
4. This character set should be designated as a "closest fit" if the final character "H" (110) is used.
5. This character set should be designated as a "closest fit" if the final character "Q" (121) is used.
6. On the Bell Canada version of the LA120, this character set is selected by ESC ( R. This means of selection is not endorsed by this standard.
7. This is the APL typewriter-paired character set.

**3 GRAPHIC CHARACTER SETS AND RELATED CODES**

Refer to Tables 1 through 11.

**Notes**

In the tables, codes are specified as 3-digit octal numbers.

A small dot adjacent to an entry indicates the character is either hand drawn or modified by hand. This type of entry may not be a perfect reproduction of the machine printed character.



Table 9. Japan (Roman)

CODE	GRAPHIC	NAMES OR MEANINGS	CODE	GRAPHIC	NAMES OR MEANINGS
041	!	Exclamation Point	070	8	Digit Eight
042	"	Quotation Marks, Diaeresis	071	9	Digit Nine
043	#	Number Sign	072	:	Colon
044	\$	Dollar Sign	073	;	Semicolon
045	%	Percent Sign	074	<	Opening (Left) Angle Bracket, Less Than Sign
046	&	Ampersand	075	=	Equal Sign
047	'	Closing Single Quotation Mark, Apostrophe, Acute Accent	076	>	Closing (Right) Angle Bracket, Greater Than Sign
050	(	Opening (Left) Parenthesis	077	?	Question Mark
051	)	Closing (Right) Parenthesis	100	@	Commercial At Sign
052	*	Asterisk	101	A	Capital Letter A
053	+	Plus Sign	102	B	Capital Letter B
054	,	Comma, Cedilla	103	C	Capital Letter C
055	-	Hyphen, Minus Sign	104	D	Capital Letter D
056	.	Period, Full Stop, Decimal Point	105	E	Capital Letter E
057	/	Solidus, Slant, Slash	106	F	Capital Letter F
060	0	Digit Zero	107	G	Capital Letter G
061	1	Digit One	110	H	Capital Letter H
062	2	Digit Two	111	I	Capital Letter I
063	3	Digit Three	112	J	Capital Letter J
064	4	Digit Four	113	K	Capital Letter K
065	5	Digit Five	114	L	Capital Letter L
066	6	Digit Six	115	M	Capital Letter M
067	7	Digit Seven	116	N	Capital Letter N
			117	O	Capital Letter O

Table 9. Japan (Roman) (continued)

CODE	GRAPHIC	NAMES OR MEANINGS	CODE	GRAPHIC	NAMES OR MEANINGS
120	P	Capital Letter P	150	h	Small Letter H
121	Q	Capital Letter Q	151	i	Small Letter I
122	R	Capital Letter R	152	j	Small Letter J
123	S	Capital Letter S	153	k	Small Letter K
124	T	Capital Letter T	154	l	Small Letter L
125	U	Capital Letter U	155	m	Small Letter M
126	V	Capital Letter V	156	n	Small Letter N
127	W	Capital Letter W	157	o	Small Letter O
130	X	Capital Letter X	160	p	Small Letter P
131	Y	Capital Letter Y	161	q	Small Letter Q
132	Z	Capital Letter Z	162	r	Small Letter R
133	[	Opening (Left) Square Bracket	163	s	Small Letter S
134	¥	Yen Sign	164	t	Small Letter T
135	]	Closing (Right) Square Bracket	165	u	Small Letter U
136	^	Upward Arrow Head, Circumflex Accent	166	v	Small Letter V
137	_	Underline	167	w	Small Letter W
140	`	Opening Single Quotation Mark, Grave Accent	170	x	Small Letter X
141	a	Small Letter A	171	y	Small Letter Y
142	b	Small Letter B	172	z	Small Letter Z
143	c	Small Letter C	173	{	Opening (Left) Curly Bracket, Opening (Left) Brace
144	d	Small Letter D	174		Vertical Line
145	e	Small Letter E	175	}	Closing (Right) Curly Bracket, Closing (Right) Brace
146	f	Small Letter F	176	~	Tilde, Overline, General Accent
		Small Letter G			

Table 10. Japan (Katakana)

CODE	GRAPHIC	NAMES OR PRONUNCIATIONS	CODE	GRAPHIC	NAMES OR PRONUNCIATIONS
041	・	Full Stop	070	ク	KU
042	〔	Opening Bracket	071	ケ	KE
043	〕	Closing Bracket	072	コ	KO
044	、	Comma	073	サ	SA
045	・	Conjunctive Symbol	074	シ	SHI
046	ワ	Wo	075	ス	SU
047	ア	Small A	076	セ	SE
050	イ	Small I	077	ソ	SO
051	ウ	Small U	100	タ	TA
052	エ	Small E	101	チ	CHI
053	オ	Small O	102	ツ	TSU
054	ヤ	Small YA	103	テ	TE
055	ユ	Small YU	104	ト	TO
056	ヨ	Small YO	105	ナ	NA
057	ツ	Small TSU	106	ニ	NI
060	ー	Prolonged Sound Symbol	107	ヌ	NU
061	パ	A	110	ネ	NE
062	ピ	I	111	ノ	NO
063	プ	U	112	ハ	HA
064	ペ	E	113	ヒ	HI
065	ポ	O	114	フ	FU
066	カ	KA	115	ヘ	HE
067	キ	KI	116	ホ	HO
			117	マ	MA

Table 10. Japan (Katakana) (continued)

CODE	GRAPHIC	NAMES OR PRONUNCIATIONS	CODE	GRAPHIC	NAMES OR PRONUNCIATIONS
120	ミ	MI	150	ネ	NE
121	ム	MU	151	ノ	NO
122	メ	ME	152	ハ	HA
123	モ	MO	153	ヒ	HI
124	ヤ	YA	154	フ	FU
125	ユ	YU	155	ヘ	HE
126	ヨ	YO	156	ホ	HO
127	ラ	RA	157	マ	MA
130	リ	RI	160	ミ	MI
131	ル	RU	161	ム	MU
132	レ	RE	162	メ	ME
133	ロ	RO	163	モ	MO
134	ワ	WA	164	ヤ	YA
135	ン	N(M)	165	ユ	YU
136	ゐ	Voiced Sound Symbol	166	ヨ	YO
137	ゑ	Semi-Voiced Sound Symbol	167	ラ	RA
140	タ	TA	170	リ	RI
141	チ	CHI	171	ル	RU
142	ツ	TSU	172	レ	RE
143	テ	TE	173	ロ	RO
144	ト	TO	174	ワ	WA
145	ナ	NA	175	ン	N(M)
146	ニ	NI	176	ゐ	Voiced Sound Symbol
147	ヌ	NU			

Table 11. APL

CODE	GRAPHIC	NAMES OR MEANINGS	CODE	GRAPHIC	NAMES OR MEANINGS
041	"	Diastasis	070	8	Digit 8
042	)	Closing (Right) Parenthesis	071	9	Digit 9
043	<	Less Than Sign	072	(	Opening (Left) Parenthesis
044	≤	Less Than Or Equal Sign	073	[	Opening (Left) Square Bracket
045	=	Equal Sign	074	;	Semicolon
046	>	Greater Than Sign	075	×	Multiplication Sign
047	]	Closing (Right) Square Bracket	076	:	Colon
050	∨	Logical Or Sign	077	\	Reverse Solidus, Reverse Slant, Backslash
051	∧	Logical And Sign	100	-	Negation Sign
052	≠	Not Equal Sign	101	α	Greek Letter Alpha
053	÷	Division Sign	102	⌈	Decode Sign
054	,	Comma	103	⌋	
055	+	Plus Sign	104	⌊	Floor, Minimum
056	.	Period, Full Stop, Decimal Point	105	ε	Greek Letter Epsilon
057	/	Solidus, Slant, Slash	106	_	Underscore
060	0	Digit 0	107	∇	Del
061	1	Digit 1	110	Δ	Delta
062	2	Digit 2	111	ι	Index
063	3	Digit 3	112	∘	Small Circle
064	4	Digit 4	113	⋅	Ravel
065	5	Digit 5	114	□	Quad
066	6	Digit 6	115	⌊	Residue
067	7	Digit 7	116	⌈	Encode Sign
			117	○	Large Circle

Table 11. APL (continued)

CODE	GRAPHIC	NAMES OR MEANINGS	CODE	GRAPHIC	NAMES OR MEANINGS
120	*	Star	150	H	Capital Letter H
121	?	Question Mark	151	I	Capital Letter I
• 122	ρ	Greek Letter Rho	152	J	Capital Letter J
• 123	⌈	Ceiling	153	K	Capital Letter K
124	~	Tilde	154	L	Capital Letter L
• 125	↓	Down Arrow	155	M	Capital Letter M
• 126	U		156	N	Capital Letter N
• 127	ω	Greek Letter Omega	157	O	Capital Letter O
• 130	⇒		160	P	Capital Letter P
• 131	↑	Up Arrow	161	Q	Capital Letter Q
• 132	←		162	R	Capital Letter R
• 133	↵	Left Arrow	163	S	Capital Letter S
• 134	⌊	Left Tack	164	T	Capital Letter T
• 135	→	Right Arrow	165	U	Capital Letter U
• 136	≥	Greater Than Or Equal Sign	166	V	Capital Letter V
137	-	Minus Sign	167	W	Capital Letter W
• 140	◊	Diamond	170	X	Capital Letter X
141	A	Capital Letter A	171	Y	Capital Letter Y
142	B	Capital Letter B	172	Z	Capital Letter Z
143	C	Capital Letter C	173	{	Opening (Left) Brace
144	D	Capital Letter D	• 174	⌋	Right Tack
145	E	Capital Letter E	175	}	Closing (Right) Brace
146	F	Capital Letter F	176	\$	Dollar Sign
147	G	Capital Letter G			