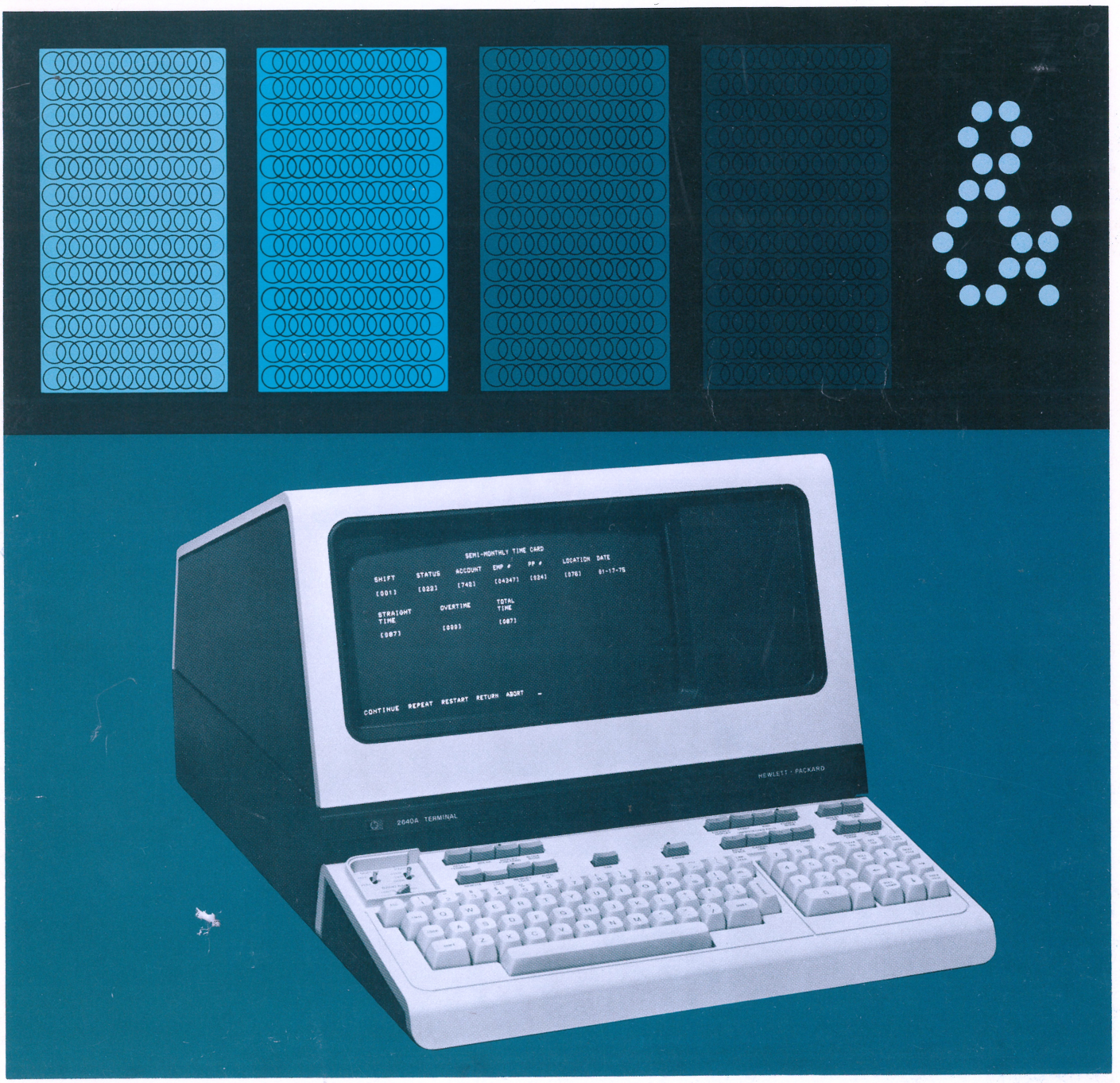
Application Note

HEWLETT hp PACKARD

2640 Series Character Set Generation



2640 Series
Character Set Generation

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CONTENTS

I. INTRODUCTION

The purpose of this kit is to enable 264XX users to generate and breadboard their own custom alphanumeric and microvector character sets. The kit contains this application note, a 02640-60053 Prom Character Board assembly, and a 02640-60070 Connector Assembly.

An initial overview of the display will give the reader familiarity with the character generation procedure employed within the terminal. This will be followed by detailed instructions and aids in designing either an alphanumeric or microvector character set and its eventual translation into PROM bit patterns. The final result of the application of the information contained in this note will be a set of PROMs containing the desired custom character set. ROM masks can be subsequently generated from the dot pattern data if the required quantity of parts is large.

Appendices A and B contain reproducible originals of several forms which are useful in designing and implementing a character set. The use of these forms is strongly encouraged to keep the dot bookkeeping simple and accurate. Finally, listings are given of the 128-character Roman set, the 64-character Math Symbol set, and the 64-character Line Drawing Set. These can be used as guides and examples in the design of new, custom character sets.

II. 2640 SERIES DISPLAY FUNDAMENTALS

THE BASIC CHARACTER CELL

The 264XX utilizes a raster scan display having a capacity of 1920 characters. It is organized as 24 rows of 80 columns spanning a screen size of nominally 10" in width by 5" in height. The basic character cell which is common to all 1920 character positions is shown in Figure 2.1. It consists of a rectangle 9 dots wide by 15 scan lines high. The blinking cursor and underline feature overlay the character cell in scan lines 11 and 12 as is shown in Figure 2.2.

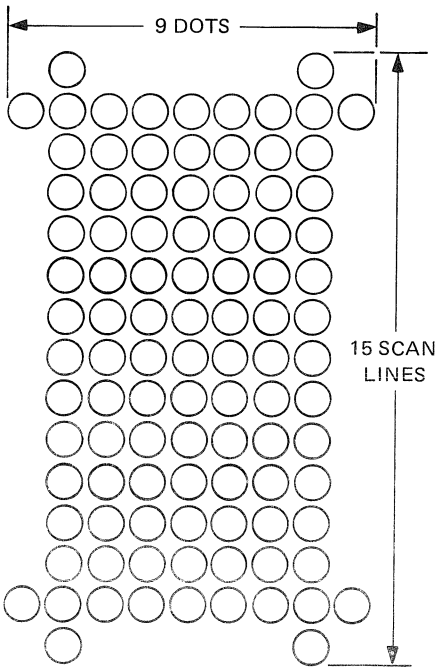


FIGURE 2.1
Basic Character Cell of 9 Dots x 15 Scan Lines With Spacers Between Characters and Rows

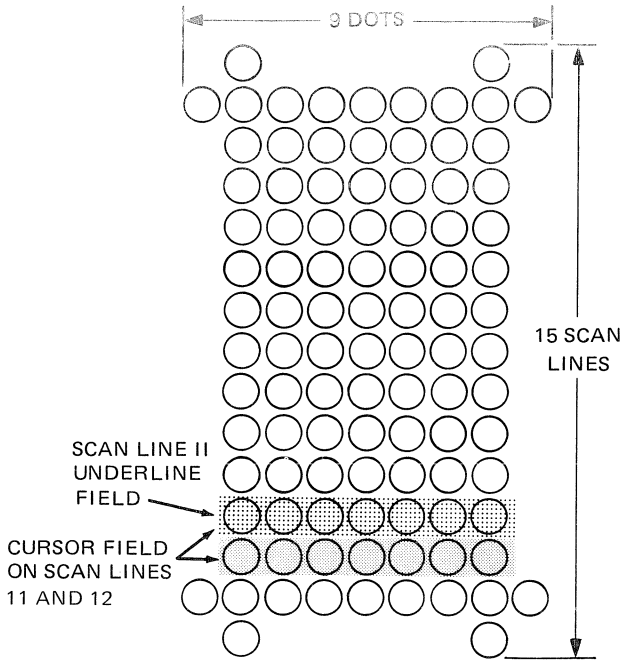


FIGURE 2.2
Basic Character Cell With Underline and Cursor Fields

TYPES OF CHARACTER SETS

Two types of character sets can be contained within the Terminal; alphanumeric sets and microvector sets. Alphanumeric sets are characterized by having a rectangle of 7 dots by 13 scan lines which are used for upper case, lower case, and control characters. Two of the dot columns, one on either side of the character, are used for horizontal character to character spacing. Similarly, two scan lines are used for vertical row to row spacing. These sets also utilize a resolution enhancing half-shift described below.

Microvector sets use the entire 9 dot by 15 scan line rectangle without the half-shift or spacer columns and scan lines. As a result, all of the encoded dots appear and the characters can be concatenated horizontally and vertically for contiguous lines. The primary purpose of the microvector sets is to generate special symbols and line segments for limited graphic display applications, forms, or histogram plots.

In practice, the horizontal line segments of characters are not visible as discrete dots but rather as line segments or bars. This results in greater light output and the elimination of horizontal discontinuities. The inherent graininess of a finite resolution dot matrix however, still remains. This is in part ameliorated by the use of the horizontal half-shift.

THE HALF-SHIFT AND CHARACTER ENHANCEMENT

Figure 2.3 illustrates a right parenthesis on a hypothetical 3x3 dot matrix. Due to the limited cell resolution the resulting character is very ragged.

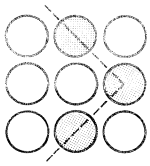


FIGURE 2.3
Ragged Right Parenthesis on Hypothetical 3x3 Dot Matrix

If the capability exists to utilize the horizontal interstitial two dots as shown in Figure 2.4, then a smoother parenthesis results.

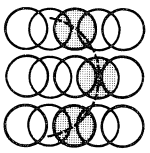


FIGURE 2.4
Smoother Right Parenthesis on Hypothetical 3x3 Dot Matrix by Utilization of a Horizontal Dot Half-Shift

The 264XX has a half-shift as described above to achieve a pseudo-resolution expansion in the horizontal direction to 13 dots; 7 non-shifted dots and the interstitial 6 half-shifted dots. Figure 2.5 shows the final character cell which the 264XX uses for all alphanumeric characters. If vertically contiguious characters are desired, such as the components of a three row high integral sign, then dots may be coded in the normally vacant spacer scan lines 0 and 14.

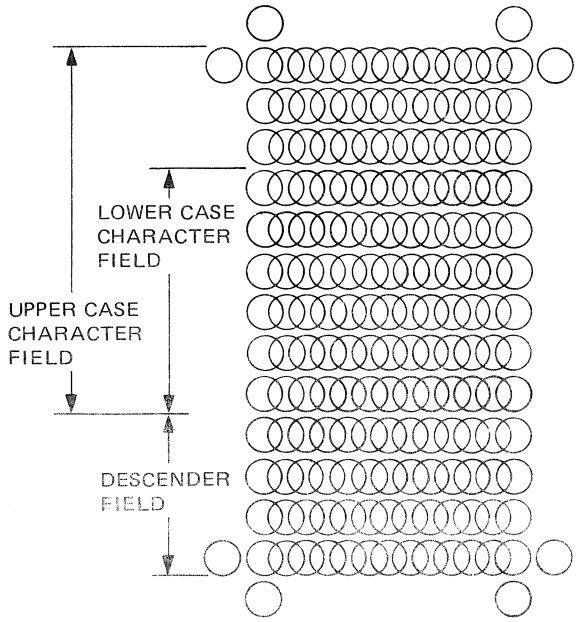


FIGURE 2.5
Basic Alphanumeric Character Cell with Six Interstitial Dot Positions 1-1/2 thru 6-1/2, Horizontal and Vertical Spacers, and Descender, Upper Case, and Lower Case Character Fields

The dot patterns which form the characters are stored in ROMs. In a basic alphanumeric system one 8K bit ROM holds the 64 character upper case primary set, including the space character. The 128 character set option consists of a second 8K bit ROM and adds the control characters and the lower case primary set, along with the delete character. The primary set is that alphabet which is immediately available to the user when the terminal is first turned on. Microvector character sets are stored as 64 characters per 9K bit ROM with partitioning similar to alphanumeric sets.

THE DISPLAY ENHANCEMENT BOARD

The Display Enhancement Board (Product No. 13231A) increases the 264XX character set capacity to 512 characters. These additional characters are partitioned as three sets of 128 characters each with 64 per ROM. The six sockets on the board can be set up with combinations of 128 or 64 character sets configured as being of either the alphanumeric or microvector type. All of the sets are accessible by means of escape sequences and control codes.

The Prom Character Set printed circuit board has the capacity for two 128 character sets encoded in 4K PROMs each containing 32 alphanumeric characters. Four 4K PROMs are required to store a 128 character set. If the set is of the microvector type, a fifth PROM is also needed to store the ninth bit of dots.

When the board is connected to either the Display Control Board or the Display Enhancement Board it can replace either the Terminal's primary set or any two of the three available alternate sets respectively. The particular two sets are selected by means of two jumpers on the PROM Character Board. The alternate sets can be of either the alphanumeric or microvector type, depending on the jumper configuration at the enhancement board. Section VIII will be describe the PROM Character Board and its use in more detail.

III. ALPHANUMERIC CHARACTER GENERATION

MEMORY ORGANIZATION

Alphanumeric characters may be stored in either ROMs or PROMs. In the former case 8K bit ROMs are used, each containing 64 characters and organized as 1K words of 8 bits each. Sixteen consecutive ROM words are used per character with the first 15 actually appearing on the screen. The sixteenth word is never accessed. The representation of characters in PROMs rather than ROMs is basically identical. The differences are that only 32 characters are stored in each 4K PROM and that they must be used with the PROM Character Board. Section V describes the partitioning of the ASCII Code for both ROMs and PROMs in detail.

The output word bits are numbered 0 through 7 with BIT 1 corresponding to the first non-spacer dot column of a character, BIT 2 to the second dot column, etc. The outputs are ground true so that when a particular word is addressed and an output line goes low, then that dot lights up on the screen.

BIT 0 serves as the half-shift control bit. When it is true, i.e., low, then bits 1 through 6 are half-shifted by one-half dot position to the right to positions 1-1/2 through 6-1/2 respectively. Bits 0 and 7 cannot be set simultaneously; that would result in a dot at position 7-1/2 which is outside the 7 by 13 character area.

THE HALF-SHIFT ALGORITHM

Three simple rules can be stated in designing an alphanumeric character set employing the half-shift:

1. In any scan line segment any combination of dots 1 through 7 can be set without the half-shift (BIT 0 of the ROM word is high).

2. In any scan line segment any combination of dots 1-1/2 through 6-1/2 can be set with the half-shift (BIT 0 of the ROM word is low).

3. In any scan line segment BIT 0 and BIT 7 cannot be simultaneously set.

Figure 3.1a illustrates a character designed to these rules. Scan lines 1, 3, 7 and 9 are half-shifted while lines 2, 4, 5, 6 and 8 are not. Figure 3.1b is a representation of the same character as it is encoded in the character ROM or PROM.

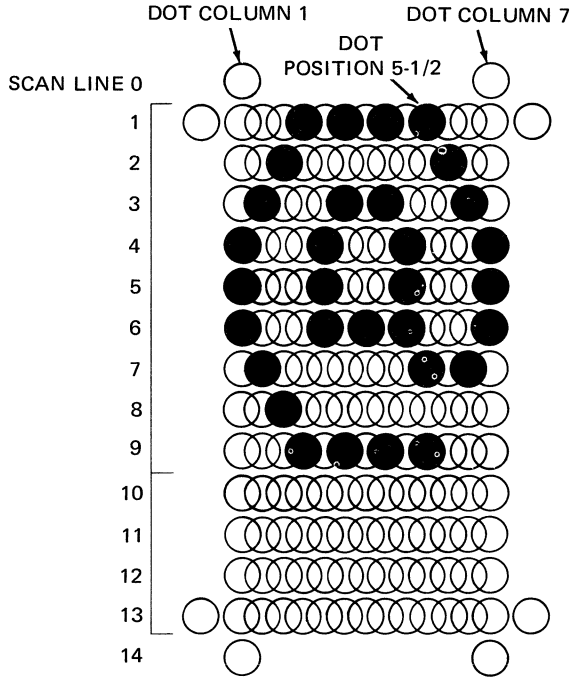


FIGURE 3.1a
An Upper Case Character Which Illustrates the Use of the Half-Shift Algorithm

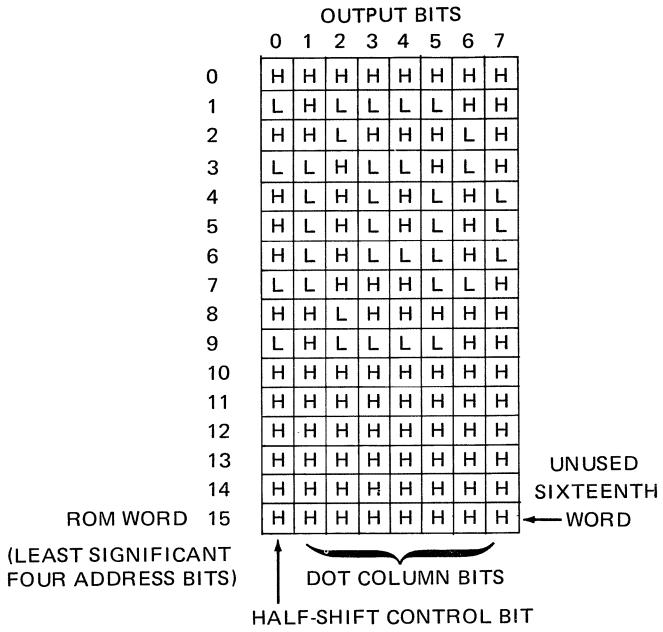


FIGURE 3.1b
Character ROM Encoding of the Same Character

IV. MICROVECTOR CHARACTER GENERATION

MEMORY ORGANIZATION

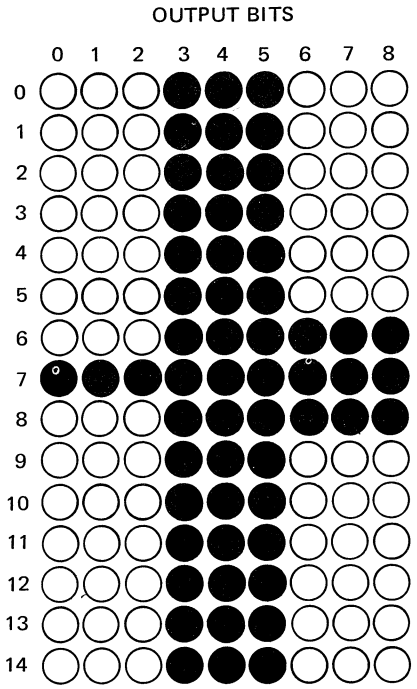
Microvector characters, like alphanumeric characters, may be stored in either ROMs or PROMs. In the former case 9K bit ROMs are used, each containing 64 characters and organized as 1K words of 9 bits each. Sixteen consecutive ROM words are used per character with the first 15 actually appearing on the screen. The sixteenth word is never accessed. The representation of microvector characters in PROMs rather than ROMs is only slightly different in its implementation; 32 microvector characters are stored in each 4K PROM and an additional PROM is multiplexed over the entire 128 character set to provide the ninth data bit. As with the alphanumeric character sets, these PROMs must be used with the PROM character Board. Section V describes the partitioning of the ASCII Code for both ROMs and PROMs in detail.

The output word bits are numbered 0 through 8 with BIT 0 corresponding to the extreme left dot position in the character cell. BIT 1 corresponds to the second dot position, etc. As with the alphanumeric character ROMs and PROMs, the outputs are ground true so that when a particular word is addressed and an output line goes low, then that dot lights up on the screen.

MICROVECTOR DOT MATRIX

All 9 dots by 15 scan lines of the character cell are encoded within the Microvector character ROMs or PROMs. This gives the designer the freedom to generate any desired combination of vertically and/or horizontally contiguous characters within the 9x15 cell matrix. Larger characters can be formed by clustering several characters together to make a larger dot matrix.

Figure 4.1 illustrates a microvector character from the Line Drawing Set (See Appendix G) and its representation in ROM.



OUTPUT BITS

	0	1	2	3	4	5	6	7	8	
0	H	H	H	L	L	L	H	H	H	
1	H	H	H	L	L	L	H	H	H	
2	H	H	H	L	L	L	H	H	H	
3	H	H	H	L	L	L	H	H	H	
4	H	H	H	L	L	L	H	H	H	
5	H	H	H	L	L	L	H	H	H	
6	H	H	H	L	L	L	L	L	L	
7	L	L	L	L	L	L	L	L	L	
8	H	H	H	L	L	L	L	L	L	
9	H	H	H	L	L	L	H	H	H	
10	H	H	H	L	L	L	H	H	H	
11	H	H	H	L	L	L	H	H	H	
12	H	H	H	L	L	L	H	H	H	
13	H	H	H	L	L	L	H	H	H	UNUSED
14	H	H	H	L	L	L	H	H	H	SIXTEENTH
ROM WORD 15	H	H	H	H	H	H	H	H	H	←WORD

(LEAST SIGNIFICANT FOUR ADDRESS BITS)

DOT COLUMN BITS

FIGURE 4.1

A representative Microvector Character and its Coding in ROM

V. THE ASCII CODE AND THE 264XX

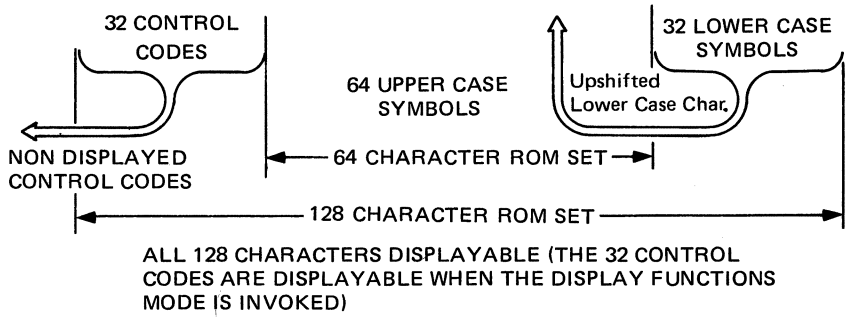
This section will cover three areas of importance in the generation of a new character set. The first topic will deal with the partitioning of the 7-bit ASCII code within the 264XX into upper case, lower case, and control characters, both in ROM and PROM. Reference will then be made to those areas of the ASCII chart wherein expansion to alternate character sets is possible. Finally the mapping procedure from the keyboard to the ASCII chart will be covered.

Armed with this information the user can then answer the following fundamental questions before beginning a character set: 1) How many characters must be designed? 2) How many PROMs or ROMs will be needed to implement the set?, and 3) Where will the characters appear on the keyboard?

ASCII CODE PARTITIONING WITHIN THE 264XX

The 264XX partitions the 7-bit ASCII code into three categories; 64 upper case symbols, 32 lower case symbols, and 32 control codes. See Figure 5-1, taken from the standard ANSI code (ANS X3.4-1968). In the basic system only the 64 upper case ROM symbols are displayable; all lower case ROM symbols automatically become shifted to their upper case representations and control codes are stripped out. With the addition of the 128 character set option, all characters become displayable, including the control codes when in the Display Function mode.

					000-037B		040-077B		100-137B		140-177B	
b7 b6 b5					0_0	0_1	$0_1{}_0$	$0_1{}_1$	1_0	$1_0{}_1$	$1_1{}_0$	$1_1{}_1$
BITS	b4	b3	b2	b1	ROW \ COLUMN	0	1	2	3	4	5	6	7
	0	0	0	0	0	NUL	DLE	SP	0	@	P	`	p
	0	0	0	1	1	SOH	DC1	!	1	A	Q	a	q
	0	0	1	0	2	STX	DC2	"	2	B	R	b	r
	0	0	1	1	3	ETX	DC3	#	3	C	S	c	s
	0	1	0	0	4	EOT	DC4	$	4	D	T	d	t
	0	1	0	1	5	ENQ	NAK	%	5	E	U	e	u
	0	1	1	0	6	ACK	SYN	&	6	F	V	f	v
	0	1	1	1	7	BEL	ETB	'	7	G	W	g	w
	1	0	0	0	8	BS	CAN	(	8	H	X	h	x
	1	0	0	1	9	HT	EM	)	9	I	Y	i	y
	1	0	1	0	10	LF	SUB	*	:	J	Z	j	z
	1	0	1	1	11	VT	ESC	+	;	K	[	k	{
	1	1	0	0	12	FF	FS	,	<	L	\	l	¦
	1	1	0	1	13	CR	GS	–	=	M	]	m	}
	1	1	1	0	14	SO	RS	.	>	N	^	n	~
	1	1	1	1	15	SI	US	/	?	O	—	o	DEL



ALL 128 CHARACTERS DISPLAYABLE (THE 32 CONTROL CODES ARE DISPLAYABLE WHEN THE DISPLAY FUNCTIONS MODE IS INVOKED)

FIGURE 5.1
Partitioning of the 7 Bit ASCII Code With a 64 and a 128 Character Set in ROM.

The upper case ROM stores the 64 upper case symbols (040-137B) while the lower case ROM stores the 32 control codes (000-037B) and the 32 lower case symbols (140-177B). Figure 5.2 illustrates the character ordering within the ROMs. When a 128 character set is stored in PROMs, then the character partitioning is as shown in Figure 5.3. Each holds the 32 consecutive characters contained in one half of a character ROM. PROM sets are always treated as containing 128 characters; there is no upshifting of lower case symbols to their upper case representation.

UPPER CASE ROM
040-137B
(SP- __)

0	SP	16	0	32	@	48	P
1	!	17	1	33	A	49	Q
2	"	18	2	34	B	50	R
3	#	19	3	35	C	51	S
4	$	20	4	36	D	52	T
5	%	21	5	37	E	53	U
6	&	22	6	38	F	54	V
7	'	23	7	39	G	55	W
8	(	24	8	40	H	56	X
9	)	25	9	41	I	57	Y
10	*	26	:	42	J	58	Z
11	+	27	;	43	K	59	[
12	,	28	<	44	L	60	\
13	–	29	=	45	M	61	]
14	.	30	>	46	N	62	^
15	/	31	?	47	O	63	_

LOWER CASE ROM
000-037B,
140-177B

0	NUL	16	DLE	32	`	48	p
1	SOH	17	DC1	33	a	49	q
2	STX	18	DC2	34	b	50	r
3	ETX	19	DC3	35	c	51	s
4	EOT	20	DC4	36	d	52	t
5	ENQ	21	NAK	37	e	53	u
6	ACK	22	SYN	38	f	54	v
7	BEL	23	ETB	39	g	55	w
8	BS	24	CAN	40	h	56	x
9	HT	25	EM	41	i	57	y
10	LF	26	SUB	42	j	58	z
11	VT	27	ESC	43	k	59	{
12	FF	28	FS	44	l	60	¦
13	CR	29	GS	45	m	61	}
14	SO	30	RS	46	n	62	~
15	SI	31	US	47	o	63	DEL

($N_U - U_S$, ` – DEL)

FIGURE 5.2
Character Ordering Within the Upper Case
64 Character ROM & the Lower Case 64 Character ROM

0	NUL	16	DLE
1	SOH	17	DC1
2	STX	18	DC2
3	ETX	19	DC3
4	EOT	20	DC4
5	ENQ	21	NAK
6	ACK	22	SYN
7	BEL	23	ETB
8	BS	24	CAN
9	HT	25	EM
10	LF	26	SUB
11	VT	27	ESC
12	FF	28	FS
13	CR	29	GS
14	SO	30	RS
15	SI	31	US

000-037B ($N_U - U_S$)

0	SP	16	0
1	!	17	1
2	"	18	2
3	#	19	3
4	$	20	4
5	%	21	5
6	&	22	6
7	'	23	7
8	(	24	8
9	)	25	9
10	*	26	:
11	+	27	;
12	,	28	<
13	–	29	=
14	.	30	>
15	/	31	?

040-077B (SP– ?)

0	@	16	P
1	A	17	Q
2	B	18	R
3	C	19	S
4	D	20	T
5	E	21	U
6	F	22	V
7	G	23	W
8	H	24	X
9	I	25	Y
10	J	26	Z
11	K	27	[
12	L	28	\
13	M	29	]
14	N	30	^
15	O	31	_

100-137B (@ - _)

0	`	16	p
1	a	17	q
2	b	18	r
3	c	19	s
4	d	20	t
5	e	21	u
6	f	22	v
7	g	23	w
8	h	24	x
9	i	25	y
10	j	26	z
11	k	27	{
12	l	28	¦
13	m	29	}
14	n	30	~
15	o	31	DEL

140-177B (` - DEL)

FIGURE 5.3
PROM Partitioning for 128 Characters

ANSI CODE EXTENSION

The proposed ANSI code extension (ANSI X3.4, 1968) partitions the 7-bit ASCII code into the following four groups: 1) a set of 32 control codes; 2) a set of 94 graphic characters comprising the upper case and lower case symbols; 3) the space character; and 4) the delete character. See Figure 5.4.

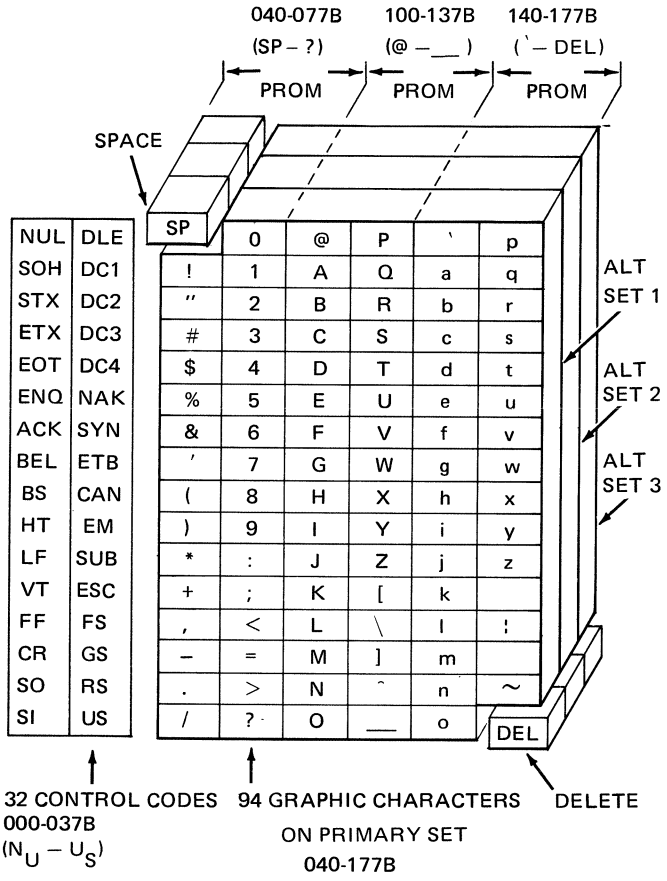


FIGURE 5.4
ANSI Partitioning of the 7 Bit ASCII Code
Also Shown Are Three Alternate 94 Character Graphic Sets

It is in the better interest of the user to not attempt to redefine the 32 control characters inasmuch as most of them are utilized by the 264XX. Similarly, the space and delete characters are already designated by convention for all graphic sets and must not be reassigned. This leaves the 94 graphic symbols of which 63 are in the upper case set (along with the space) and 32 are in the lower case set (including delete).

Figure 5.4 also illustrates the three alternate character sets which can reside within the terminal. Each set consists of 94 graphic characters, space, delete, and the original 32 control characters. For many applications alternate sets limited to 64 alphanumeric characters will suffice; these can be implemented in two 4K PROMs appearing together as an upper case set. If a ROM implementation is required later, then a single 8K ROM can contain the 64 characters.

Alphanumeric sets requiring 96 characters need three 4K PROMs for their implementation. In most cases the 32 control codes need not be replicated in the alternate sets since they are carried in the base set. If ROMs are used, however, the residual 32 characters of the lower case ROM would contain them anyway.

Microvector sets follow partitioning similar to alphanumeric sets. Only two differences need be noted. First, one PROM containing the ninth dot column must be used independent of the size of the alternate set. Secondly, ROM implementations utilize a 9K ROM to store 64 characters. The coding of both alphanumeric and microvector PROM sets will be covered in more detail in Section VII.

KEYBOARD ASSIGNMENTS

With the simple addition of PROM or ROM alternate sets the keycap-to-displayed character assignment does not change; to do so would entail firmware changes within the 264XX. All custom characters will then map with a one-to-one correspondence between the physical keys on the keyboard and the character's position on the ASCII chart. The basic Roman character set as defined by ANSI X3.4, 1968 should be used to locate a new character's ASCII chart location given its desired keyboard address.

For example, the "@" key may be assigned a new arbitrary symbol in some custom character set. To invoke that symbol requires that it be stored as the 33rd character of an upper case set, or at 100B.

It is advantageous when designing a new custom character set to first decide upon the keyboard assignment of the characters themselves. Such questions as how many characters are needed and where to place them on the keyboard must be answered. Having done this then leads immediately to the order in which the characters must be packed within the PROMs. The last step is the detailed design of the individual characters themselves; coding them into the PROM format, and getting the PROMs programmed.

VI. HINTS AND TIPS ON CHARACTER DESIGN

The design of a character set is more an art than a science; as such, aesthetics and human judgment predominate during the design and layout. This is especially true in the design of a foreign language alphabet. A person undertaking this task should, ideally, have at least a reading knowledge of the language to insure an accurate rendering of subtle character details. With this consideration in mind, though, some general tips can still be enumerated which can help the user wade through the morass of judgment and compromise needed to realize a working character set.

UNIFORMITY OF CHARACTER STYLE

The character style and symbol complexity are strong functions of the language being designed. Some languages will be difficult, while others will be fairly easy to reproduce in a dot matrix format.

Character representation variations such as varying line weights or slants may not be possible in many languages; if the symbols are complex, then heavy or slanted characters may exceed the width of the character cell. Similarly, the rigid format of a dot matrix makes most ornate variations difficult or impossible. Italic or script fonts may exceed the character cell on some characters. If, in spite of this, such a set is designed anyway with some characters not embellished, then the overall uniformity of the set is destroyed. The net effect is somewhat unpleasant and distasteful to the eye. The decision to use serifs on the characters also falls into this category. If they are used at all, they must be used everywhere to generate a uniformly harmonious set.

HORIZONTAL CENTERING

Another aspect of uniformity in character design is that all characters be centered within their respective cells. It is advantageous from an esthetic standpoint to spend a moment checking a character's centering after designing it. If it is an integral number of dots in width then centering can be done exactly via the half-shift. Otherwise the character can only be centered to within half a dot. Figure 6.1 illustrates an off-center character and a recentered version.

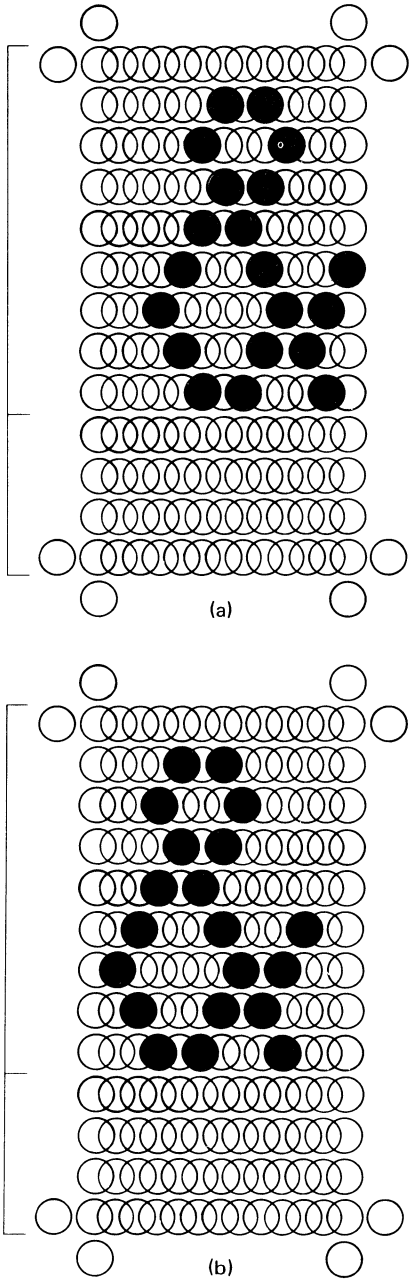


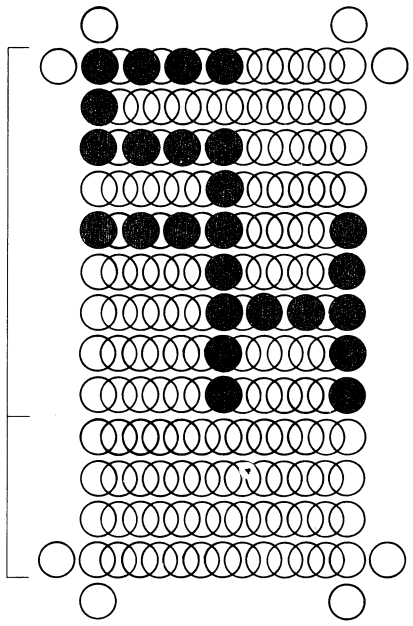
FIGURE 6.1
Illustrations of (a) Off-Center Character, and
(b) the Same Character Recentered to Within One Half Dot of True Center

LOWER CASE CHARACTER HEIGHT

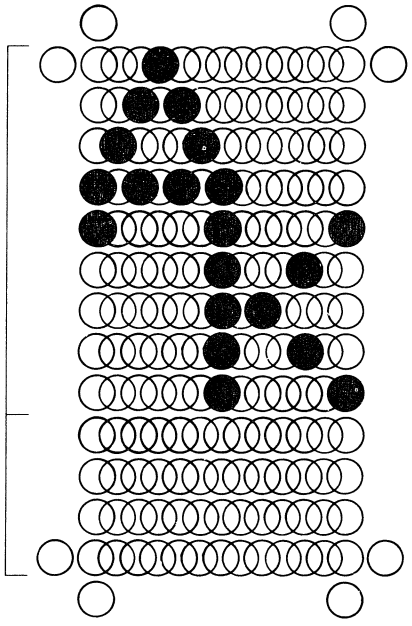
Lower case characters may be either 5 or 6 scan lines in height. The only advantage of using 5 lines is that a center line now exists. This advantage is offset by the more important consideration of lower legibility due to a smaller character. A 6 scan line high lower case character is strongly recommended in that the 20% increase in height more than compensates for the loss of the center line and yields a more legible character. Lower case descenders should utilize the entire field provided from scan lines 10 through 13.

TWO CHARACTER MNEMONICS

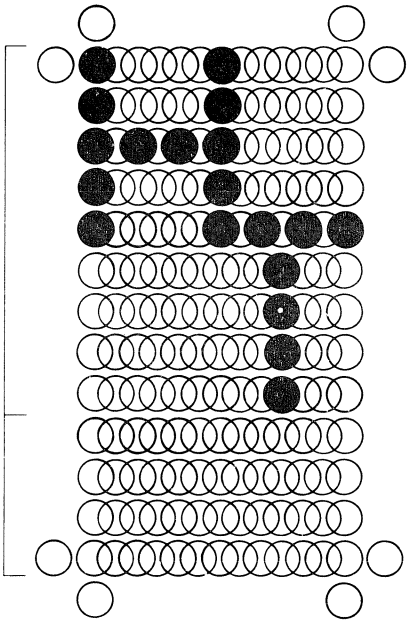
Special two character mnemonics can easily be coded within the 264XX character font. Several examples taken from the ASCII Control Codes are shown in Figure 6.2. Similar special characters can easily be generated by overlapping two miniature 4x5 characters one dot horizontally and one scan line vertically. This results in concatenated characters which are still legible yet can easily denote special symbols or functions.



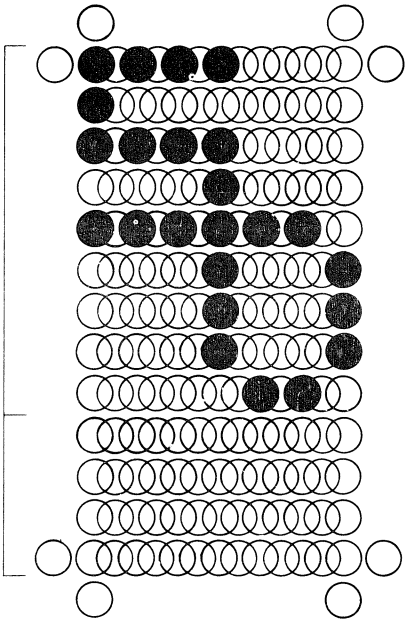
START OF HEADING



ACKNOWLEDGE



HORIZONTAL TAB



SHIFT OUT

FIGURE 6.2
Examples of Two Character Mnemonics
Taken From ASCII Control Codes

VERTICALLY CONTIGUOUS CHARACTERS

Some special alphanumeric character sets require that vertical character segments span across row boundaries. An example of this is the three segment integral sign found in the Math Symbol set (Figure 6.3). Such characters can be generated by encoding dots in the normally blank scan lines 0 and 14. When the characters are vertically butted then continuous vertical segments are formed.

CHARACTER BRIGHTNESS UNIFORMITY

One characteristic of the dot matrix which must be considered when designing characters is that diagonal segments may appear dimmer than horizontal or vertical segments. This is because the center-to-center spacing of dots on the diagonals is either 1.414 or 1.118 times the vertical spacing for non-half-shifted and half-shifted diagonals respectively.

The effect may be minimized to some extent by attempting to design out long diagonal segments intersecting horizontal or vertical segments. It is also sometimes useful to use a half-shift diagonal in place of a non-shifted diagonal since the former has the greater dot density.

Some characters, by virtue of their intrinsic shapes, have appendages which will not appear bright with respect to the bulk of the character. For example, the dot over the lower case 'i' or the dot under the exclamation point. These characters can be improved by using a cluster of three or four dots; this results in a spot which appears to be equal in brightness with the rest of the character.

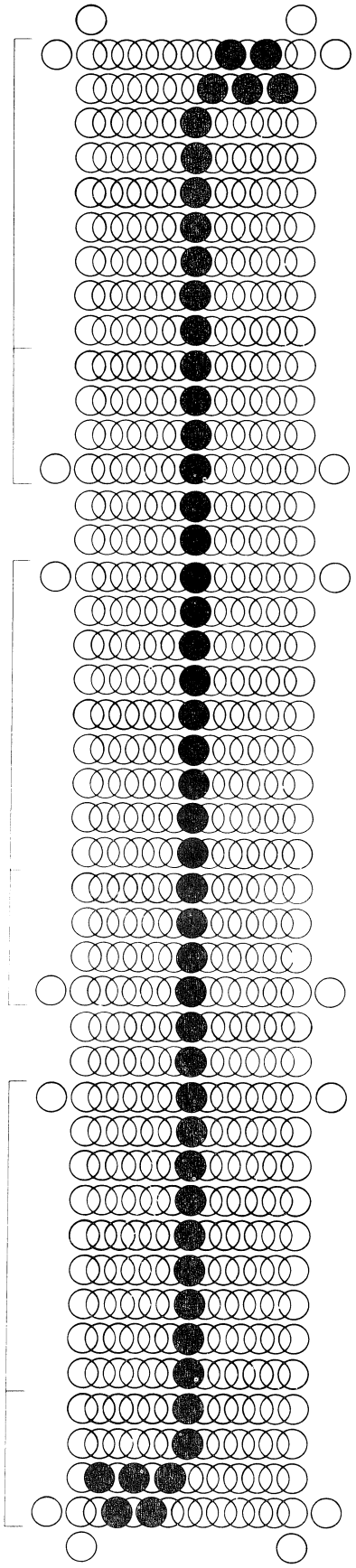


FIGURE 6.3
Three Segment Integral Sign Showing Vertical Contiguity

VII. ENCODING CHARACTERS IN PROM

This section will deal with the actual mechanics of generating character data in a format suitable for conversion to PROMs, beginning with the dot matrix and finishing with PROM data.

USE OF THE CHARACTER MATRIX WORKSHEET

Appendices A and B contain dot matrix worksheets to simplify the generation of alphanumeric and microvector characters respectively. Figure 7.1a illustrates a hypothetical alphanumeric character designed in accordance with the conventions described in Section VI. In addition, by way of example, it is desired that this character be invoked by means of the upper case "p" key on the keyboard.

Figure 7.1b shows the same character as it must be encoded as bits in a PROM. The half-shifted dots in scan lines 2, 4, 6, 8 and 10 are now represented as combinations of the half-shift control bit and the unshifted dot bits.

Similarly, Figure 7.2a illustrates a hypothetical microvector character to be invoked by means of the lower case "q". Figure 7.2b is the same character translated into bit format for two PROMs, the first holding dots 0 thru 7, and the second holding the eighth dot. (The rationale for assigning the dot 8 data to BIT 3 of the second PROM will be discussed below.)

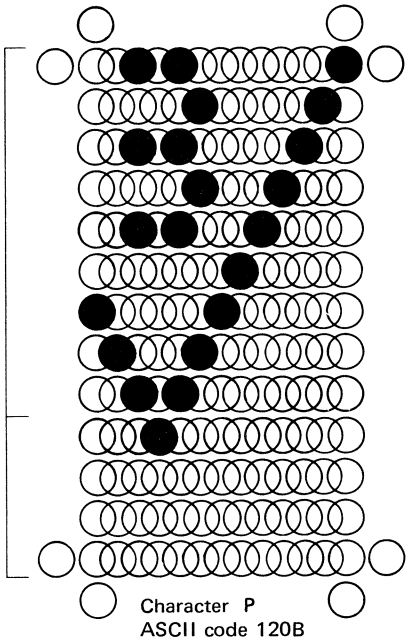
RECOMMENDED PROM VENDORS AND THEIR DATA FORMATS

Two vendors are recommended as possible suppliers of 4096 bit (512 word x 8 bit) Bipolar PROMs suitable for use in the 02640-60053 printed circuit assembly. These are the following:

Monolithic Memories, Inc., Model 6340
1165 E. Arques Avenue
Sunnyvale, CA 94086

Intel Cororation, Model 3604
3065 Bowers Avenue
Santa Clara, CA 95051

Both Intel and MMI prefer to receive the PROM data in ASCII paper tape format. It is still in the better interest of the user to verify the preferred data format with their local manufacturer's representative before encoding the data. Appendices C and D list the data formats for MMI and Intel PROMs respectively. Both are very similar except for the use of H and L by MMI and P and N by Intel to represent the absence and presence of dots.



Character P
ASCII code 120B

(a)

	BIT 0	BIT 1	BIT 2	BIT 3	BIT 4	BIT 5	BIT 6	BIT 7
0	0	0	0	0	0	0	0	0
1	0	0	1	1	0	0	0	1
2	1	0	0	1	0	0	1	0
3	0	0	1	1	0	0	1	0
4	1	0	0	1	0	1	0	0
5	0	0	1	1	0	1	0	0
6	1	0	0	0	1	0	0	0
7	0	1	0	0	1	0	0	0
8	1	1	0	1	0	0	0	0
9	0	0	1	1	0	0	0	0
10	1	0	1	0	0	0	0	0
11	0	0	0	0	0	0	0	0
12	0	0	0	0	0	0	0	0
13	0	0	0	0	0	0	0	0
14	0	0	0	0	0	0	0	0
15	0	0	0	0	0	0	0	0
	HALF-SHIFT CONTROL	DOT 1	DOT 2	DOT 3	DOT 4	DOT 5	DOT 6	DOT 7

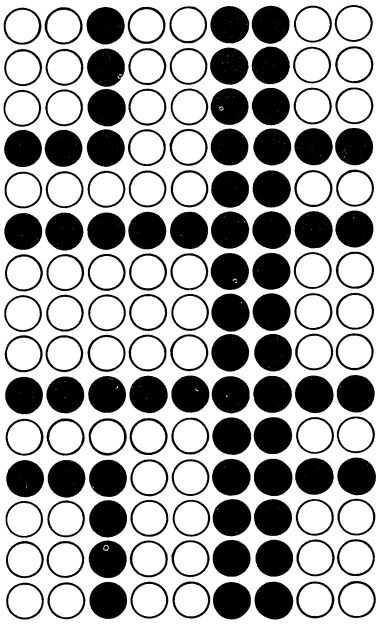
(b)

FIGURE 7.1
(a) Hypothetical Alphanumeric Character as Designed on the Alphanumeric Dot Matrix Worksheet
(b) The Same Character as Represented in Bit Format

ENCODING ALPHANUMERIC CHARACTERS IN PROM

Once the alphanumeric characters are both defined in bit format and assigned a position on the ASCII chart, it is a straightforward process to encode the bits into the PROM format. Each character requires 16 consecutive words starting with word 0. The first character occupies words 0-15, the second 16-31, etc. The example of Figure 7.1 is to be placed as the seventeenth character of the PROM containing the ASCII codes 100-137B. Hence, it would be encoded as words 256-271 of that PROM.

Figure 7.3 illustrates the same character in both MMI and Intel 4K PROM format. Note that the PROMs require the data to be encoded starting with the most significant bit whereas the half-shift control bit, BIT 0, is the least significant bit. A listing of the contents of a PROM then appears as the mirror image of the bit representation of characters (such as Figure 7.1b).



Character q
ASCII Code 161B

(a)

	BIT 0	BIT 1	BIT 2	BIT 3	BIT 4	BIT 5	BIT 6	BIT 7	BIT 3
0	0	0	1	0	0	1	1	0	0
1	0	0	1	0	0	1	1	0	0
2	0	0	1	0	0	1	1	0	0
3	1	1	1	0	0	1	1	1	1
4	0	0	0	0	0	1	1	0	0
5	1	1	1	1	1	1	1	1	1
6	0	0	0	0	0	1	1	0	0
7	0	0	0	0	0	1	1	0	0
8	0	0	0	0	0	1	1	0	0
9	1	1	1	1	1	1	1	1	1
10	0	0	0	0	0	1	1	0	0
11	1	1	1	0	0	1	1	1	1
12	0	0	1	0	0	1	1	0	0
13	0	0	1	0	0	1	1	0	0
14	0	0	1	0	0	1	1	0	0
15	0	0	0	0	0	0	0	0	0
	DOT 0	DOT 1	DOT 2	DOT 3	DOT 4	DOT 5	DOT 6	DOT 7	DOT 8

(b)

FIGURE 7.2

(a) Hypothetical Microvector Character as Designed on the Microvector Dot Matrix Worksheet
The Character is to be Invoked by Means of the "q" Key (161B)

(b) The Same Character as Represented in Bit Format; Dots 0-7 are Contained in the First of the Two Microvector PROMs While Dot 8 is Stored as BIT3 of the Second PROM.

```
                BIT 7    BIT 0
                  ↓        ↓
256-259    BHHHHHHHHHF BLHHHLLHHF BHLHHLHHLF BHLHHLLHHF
26Ø-263    BHHLHLHHLF BHHLHLLHHF BHHHLHHHLF BHHHLHHLHF
264-267    BHHHHLHLLF BHHHHLLHHF BHHHHHLHLF BHHHHHHHHF
268-271    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
                          (a)

256-259    BPPPPPPPPF BNPPPNNPPF BPNPPNPPNF BPNPPNNPPF
26Ø-263    BPPNPNPPNF BPPNPNNPPF BPPPNPPPNF BPPPNPPNPF
264-267    BPPPPNPNNF BPPPPNNPPF BPPPPPNPNF BPPPPPPPPF
268-271    BPPPPPPPPF BPPPPPPPPF BPPPPPPPPF BPPPPPPPPF
                          (b)
```

FIGURE 7.3

(a) Hypothetical Alphanumeric Character of Figure 7.1 as Encoded in an MMI 4K PROM
The Character is to be Invoked by Means of the "P" Key
(b) The Same Character as Encoded in an Intel 4K PROM

ENCODING MICROVECTOR CHARACTERS IN PROM

The translation process for converting microvector characters in bit format to PROM format is essentially the same as for alphanumeric characters with regard to dots 0-7. Dot 8 of microvector characters must be encoded as one bit position of a second PROM, the Microvector Bit 8 PROM. Table 7.1 tabulates which bit of the Microvector Bit 8 PROM must be used for each 32 character PROM in the set.

Each word of this PROM is multiplexed over the four PROMs which can hold a complete 128 character set; the least significant four output bits (0-3) correspond to the eighth microvector dot in each of the 32 characters per quadrant of the complete set. As many bit columns of the microvector Bit 8 PROM will then be used as there are 32 character PROMs in the set.

Table 7.1 can be used to verify that the example character of Figure 7.2 would use the BIT 3 column of the Microvector Bit 8 PROM. Figure 7.4 illustrates the coding of the bit format of the example in both MMI and Intel 4K PROM format. Since the character is to appear as a lower case "q", then it would occupy words 272-287 of both PROMs.

	DATA BIT USED FOR MICROVECTOR BIT 8			
CHARACTER SET PROM	BIT 0	BIT 1	BIT 2	BIT 3
000-037B (N_U - U_S)	X			
040-077B (SP – ?)		X		
100-137B (@ –___)			X	
140-177B (`– DEL)				X

TABLE 7.1
Microvector Bit 8 Assignment

```
                BIT 7   BIT 0
272-275   BHLLHHLHHF BHLLHHLHHF BHLLHHLHHF BLLLHHLLLF
276-279   BHLLHHHHHF BLLLLLLLLF BHLLHHHHHF BHLLHHHHHF
28Ø-283   BHLLHHHHHF BLLLLLLLLF BHLLHHHHHF BLLLHHLLLF
284-287   BHLLHHLHHF BHLLHHLHHF BHLLHHLHHF BHHHHHHHHF
                32 Character PROM

                  Bit 8 for PROM characters 140-177B
272-275   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHLHHHF
276-279   BHHHHHHHHF BHHHHLHHHF BHHHHHHHHF BHHHHHHHHF
28Ø-283   BHHHHHHHHF BHHHHLHHHF BHHHHHHHHF BHHHHLHHHF
284-287   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
                Microvector Bit 8 PROM
                        (a)
272-275   BPNNPPNPPF BPNNPPNPPF BPNNPPNPPF BNNNPPNNNF
276-279   BPNNPPPPPF BNNNNNNNNF BPNNPPPPPF BPNNPPPPPF
28Ø-283   BPNNPPPPPF BNNNNNNNNF BPNNPPPPPF BNNNPPNNNF
284-287   BPNNPPNPPF BPNNPPNPPF BPNNPPNPPF BPPPPPPPPF
                32 Character PROM
272-275   BPPPPPPPPF BPPPPPPPPF BPPPPPPPPF BPPPPNPPPF
276-279   BPPPPPPPPF BPPPPNPPPF BPPPPPPPPF BPPPPPPPPF
28Ø-283   BPPPPPPPPF BPPPPNPPPF BPPPPPPPPF BPPPPNPPPF
284-287   BPPPPPPPPF BPPPPPPPPF BPPPPPPPPF BPPPPPPPPF
                Microvector Bit 8 PROM
                        (b)
```

FIGURE 7.4
(a) Hypothetical Microvector Character of Figure 7.2
as Encoded in an MMI 4K PROM
The Character is to be invoked by Means of the "q" Key
The Microvector Bit 8 PROM Contents are Also Shown
(b) The Same Character as Encoded in Intel 4K PROMs

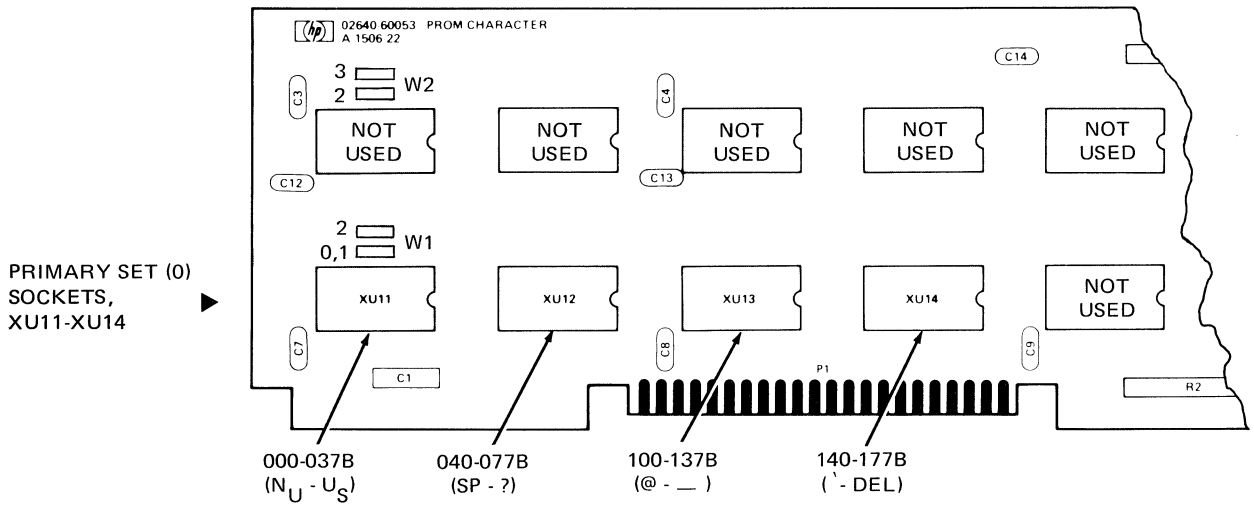
VIII. USE OF THE PROM CHARACTER BOARD

There are two configurations for the PROM Character Board. These are the replacement with custom PROM character sets of either the primary character set (SET0) or any one or two of the three available alternate sets, SET1, SET2, or SET3.

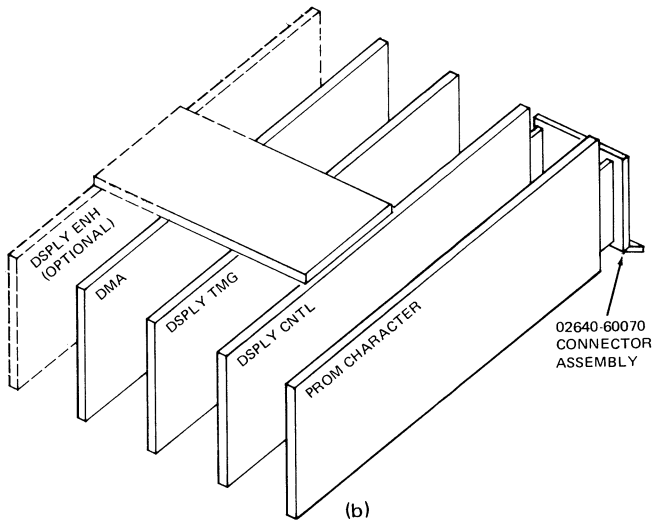
REPLACEMENT OF THE PRIMARY SET

The primary character set may be replaced with a custom alphanumeric PROM set up to 128 characters in length. Figure 8.1a illustrates the jumper configuration and PROM sockets used for this purpose. An upper case set of 64 characters, by way of example, would occupy sockets XU12 (040-077B) and XU13 (100-137B). The existing primary character set in ROM on the Display Control Board must be removed before attempting to replace the set with a PROM version. Also, the jumpers on the Display Control Board and the PROM Character Board must be configured as shown in Table 8.1.

The PROM Character Board is plugged into the 264XX backplane adjacent to the Display Control Board as is shown in Figure 8.1b. The two boards are connected together with the Connector Assembly (02640-60070) provided. Note that the correct orientation of the connector is with the handle in a downward position.



(a)



(b)

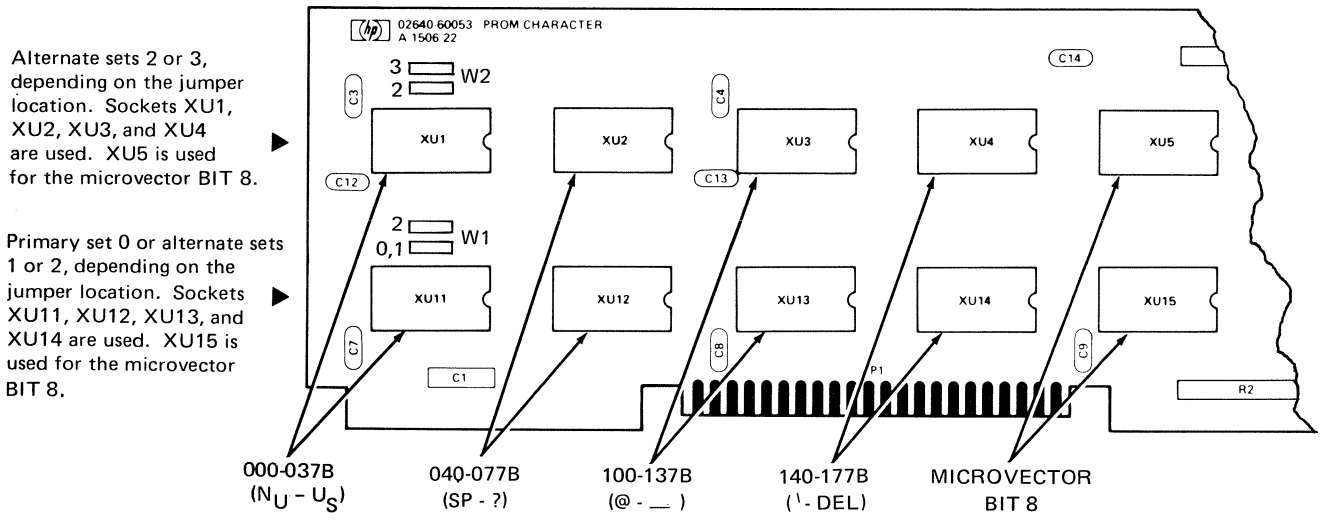
FIGURE 8.1
Replacing the Primary Set (Set O) with a PROM Version
a) PROM Location and Jumper Configuration on the PROM Character Board. b) Display Subsystem Board Configuration.

REPLACEMENT OF ALTERNATE SETS 1, 2, AND 3

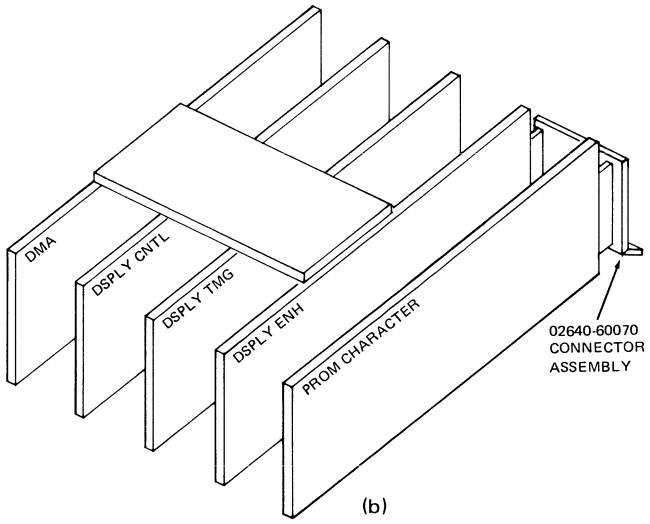
Any one or two alternate sets may be replaced with custom PROM versions. Figure 8.2a illustrates the PROM sockets used for this purpose and their respective character assignments. Table 8.1 shows the jumper configuration for both alphanumeric and microvector character sets.

A set represented in PROM cannot simultaneously be represented in ROM on the Display Enhancement Board. Mixing of different sets is permitted. Thus alternate set 1 may be a Math Symbol Set or Line Drawing Set ROM while alternate set 2 is a custom PROM set on the PROM Character Board. The jumper configuration for alternate character sets 1 and 2 would then be taken from the installation manual and Table 8.1 respectively.

The PROM Character Board is plugged into the 264XX backplane adjacent to the Display Enhancement Board as is shown in Figure 8.2b. The two boards are connected together with the Connector Assembly (02640-60070) provided. Note that the correct orientation of the connector is with the handle in a downward position.



(a)

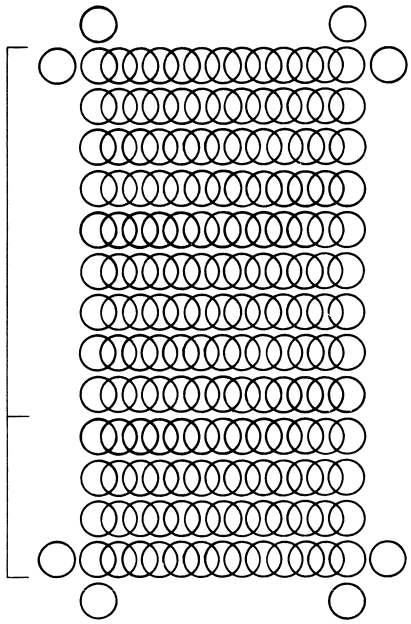


(b)

FIGURE 8.2
Replacing Alternate Sets 1, 2, or 3 with PROM Versions on the PROM Character Board. a) PROM and Jumper Locations for Replacing Alternate Sets 1, 2, or 3. b) Display Subsystem Board Configuration.

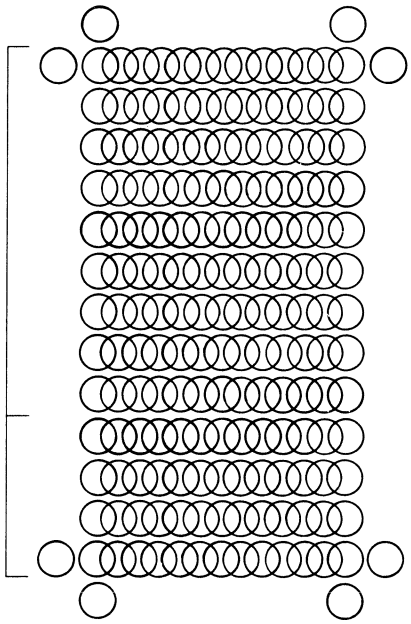
TABLE 8.1
Jumper Configurations

PROM REPLACEMENT SET	PROM CHARACTER BOARD				DISPLAY BOARD AFFECTED	
	JUMPER W1 POSITION	SOCKETS USED	JUMPER W2 POSITION	SOCKETS USED	BOARD NAME	JUMPER POSITION
SET 0	0,1	XU11–XU14	NOT USED	NOT USED	DSPY CNTL	IN
ALT SET 1	0,1	XU11–XU14 (ALSO XU15 IF SET 1 IS MICROVECTOR)	NOT USED	NOT USED	DSPY ENH	W1, W2 IN (W2 OUT IF SET 1 IS MICROVECTOR)
ALT SET 2	2	XU11–XU14 (ALSO XU15 IF SET 2 IS MICROVECTOR)	NOT USED	NOT USED	DSPY ENH	W3, W4 IN (W4 OUT IF SET 2 IS MICROVECTOR)
ALT SET 3	NOT USED	NOT USED	3	XU1–XU4 (ALSO XU5 IF SET 3 IS MICROVECTOR)	DSPY ENH	W5, W6 IN (W6 OUT IF SET 3 IS MICROVECTOR)
ALT SETS 1,2	0,1	SET 1 IN XU11–XU14 (ALSO XU15 IF SET 1 IS MICROVECTOR)	2	SET 2 IN XU1–XU4 (ALSO XU5 IF SET 2 IS MICROVECTOR)	DSPY ENH	W1, W2, W3, W4 IN (W2, W4 OUT IF SETS 1 AND/OR 2 RESPECTIVELY ARE MICRO-VECTOR)
ALT SETS 1,3	0,1	SET 1 IN XU11–XU14 (ALSO XU15 IF SET 1 IS MICROVECTOR)	3	SET 3 IN XU1–XU4 (ALSO XU5 IF SET 3 IS MICROVECTOR)	DSPY ENH	W1, W2, W5, W6 IN (W2, W6 OUT IF SETS 1 AND/OR 3 RESPECTIVELY ARE MICRO-VECTOR)
ALT SETS 2,3	2	SET 2 IN XU11–XU14 (ALSO XU15 IF SET 2 IS MICROVECTOR)	3	SET 3 IN XU1–XU4 (ALSO XU5 IF SET 3 IS MICROVECTOR)	DSPY ENH	W3, W4, W5, W6 IN (W4, W6 OUT IF SETS 2 AND/OR 3 RESPECTIVELY ARE MICRO-VECTOR)



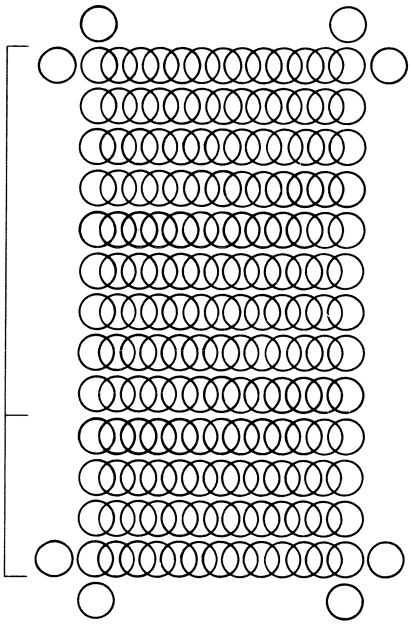
Character _____

ASCII code _____



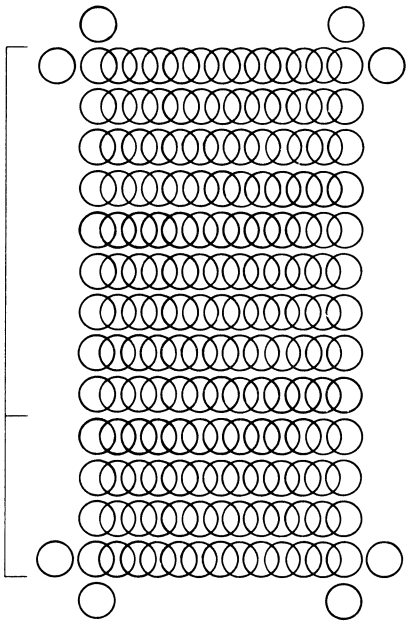
Character _____

ASCII code _____



Character _____

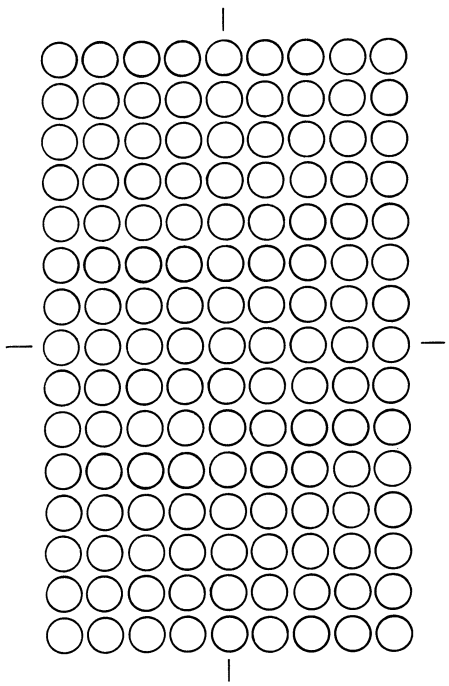
ASCII code _____



Character _____

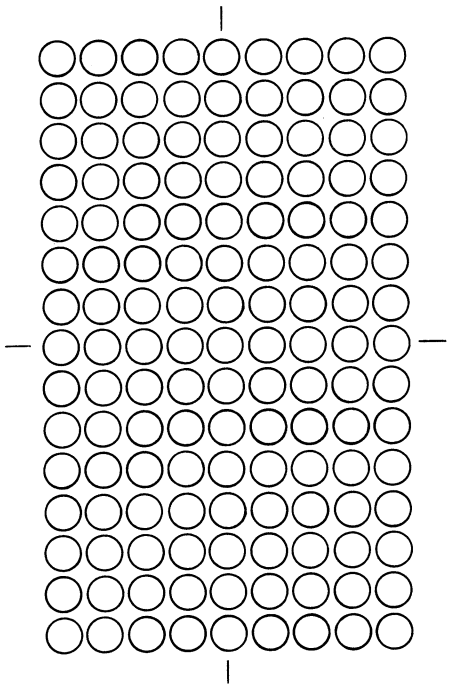
ASCII code _____

APPENDIX A Alphanumeric Character Worksheet



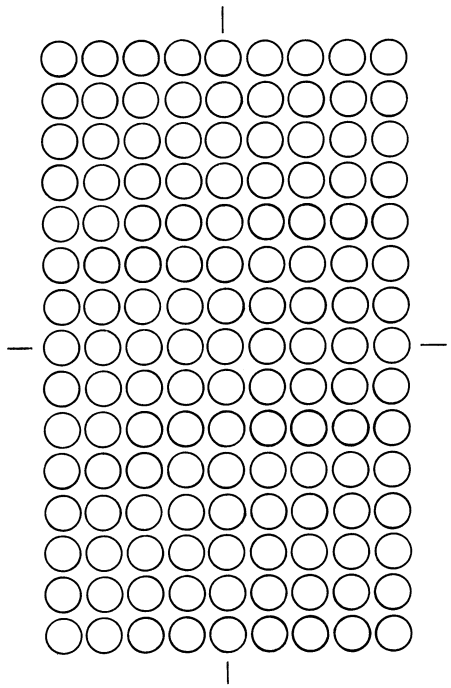
Character _____

ASCII code _____



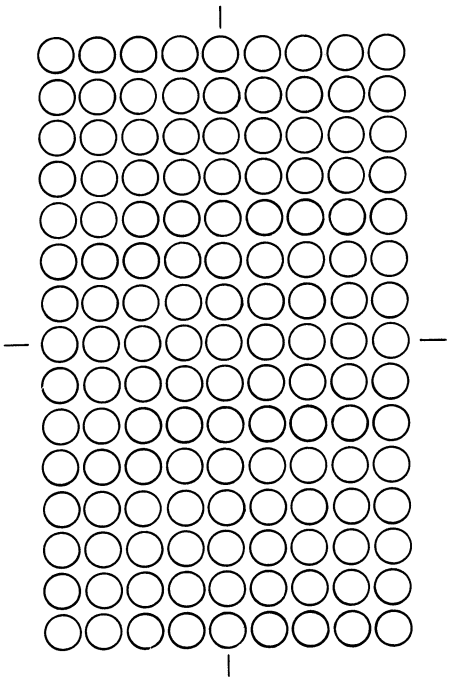
Character _____

ASCII code _____



Character _____

ASCII code _____



Character _____

ASCII code _____

APPENDIX B Microvector Character Worksheet

PROGRAMMING INFORMATION

REQUIRED INFORMATION FOR MMI TO PROGRAM TO YOUR TRUTH TABLE

TRUTH TABLES

MMI can program devices at our facility from MMI truth table forms (available on request). For customers desiring to make their own forms, an example is shown below:

	OUTPUTS							
PIN →	17	16	15	14	13	11	10	9
WORD NUMBER	O_8	O_7	O_6	O_5	O_4	O_3	O_2	O_1
0	H	H	H	L	H	L	H	H
1	L	H	L	H	L	H	L	H
.	.	.	.	.	.	.	.	.
.	.	.	.	.	.	.	.	.
511	L	H	H	H	H	H	H	L

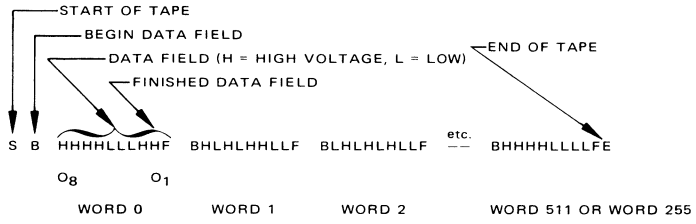
Note: A high voltage on the data out lines is signified by an "H." A low voltage on the data out lines is signified by an "L." The word number assumes positive logic on the address pins, so for example, word 511 = HHHHHHHH.

PAPER TAPE FORMAT

Truth tables can also be sent to MMI in an ASCII tape format. Information can be sent to us by air mail or TWX 910-339-9224. The tape reading equipment at MMI only recognizes ASCII characters S, B, H, L, F and E and interprets them respectively as Start Begin a word, High data, Low data, Finish a word, and End of tape. All other characters such as carriage returns, line feeds, etc. are ignored so that comments and spaces may be sent in the data field to improve readability. Comments, however, should not use the characters S, B, H, L, F, E. Word addresses must begin with zero and count sequentially to word 511.

In order to assist the machine operator in determining where the heading information stops and the data field begins. 25 bell characters or rubout characters should precede the start of the truth table. Any type of paper tape (mylar, fanfold, etc.) is acceptable. Channel 1 is the most significant bit and channel 8 (parity) is ignored. Sprocket holes are located between channels 3 and 4. Note that the order of the outputs between characters B and F is O_8 to O_1, not O_1 to O_8.

A typical list of characters and their machine interpretations is shown on the next page.



The required heading information at the beginning of the tape is as follows:

CUSTOMER'S NAME AND PHONE _____ TRUTH TABLE NUMBER _____

CUSTOMER'S TWX NUMBER _____ NUMBER OF TRUTH TABLES _____

PURCHASE ORDER NUMBER _____ TOTAL NUMBER OF PARTS _____

MMI PART NUMBER _____ NUMBER OF PARTS OF EACH TRUTH TABLE _____

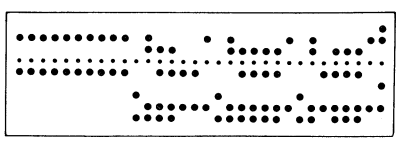
CUSTOMER SYMBOLIZED PART NUMBER _____ 25 BELL OR RUBOUT CHARACTERS _____

An example is shown below for a 256 x 4 PROM (6300)

BLARNEY ELECTRONICS 408-735-8104
TWX 911-338-9225
PO142
6300
0431
12
1
3
3

SBLLLHF BLLLLF BLHLHF BLHHHF BLLHHF BHHHHF BLLLHF BLHLHF BLLLLF
BLLLLF BLHLHF BLLHHF BHHHLF BHHLLF BLLHHF BHHLLF BLLHHF BLHLHF

8 level
TWX



Input Format

I. ROM and PROM Truth Table Format

Programming information should be sent in the form of computer punched cards or punched paper tape. When using the 7600C or MCS programmers, punched paper tape should be used. In all cases, a printout of the truth table should be accompanied with the order.

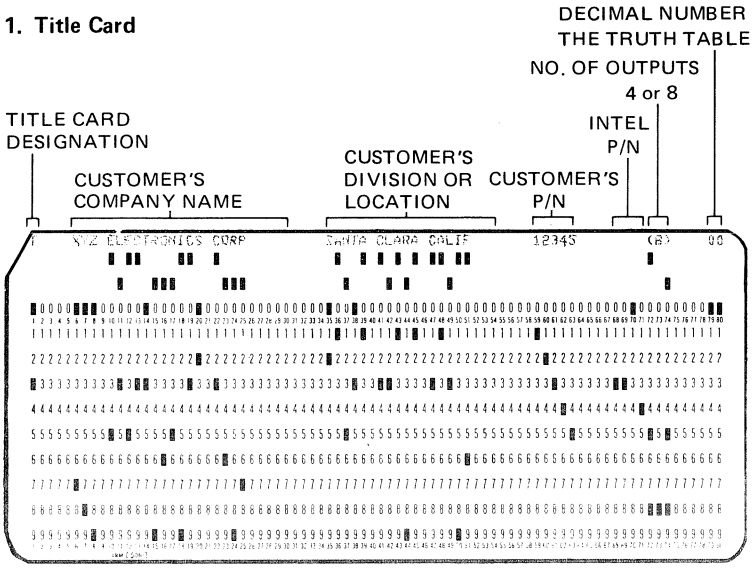
The following general format is applicable to the programming information sent to Intel:

1. A data field should start with the most significant bit and end with the least significant bit.
2. The data field should consist of P's and N's. A P is to indicate a high level output (most positive) and an N a low level output (most negative). If the programming information is sent on a punched paper tape, then a start character, B, and an end character, F, must be used in the data field.

A. PUNCHED CARD FORMAT

An 80 column Hollerith card (preferably interpreted) punched by an IBM 026 or 029 keypunch should be submitted. The first card will be a title card. The format is as follows:

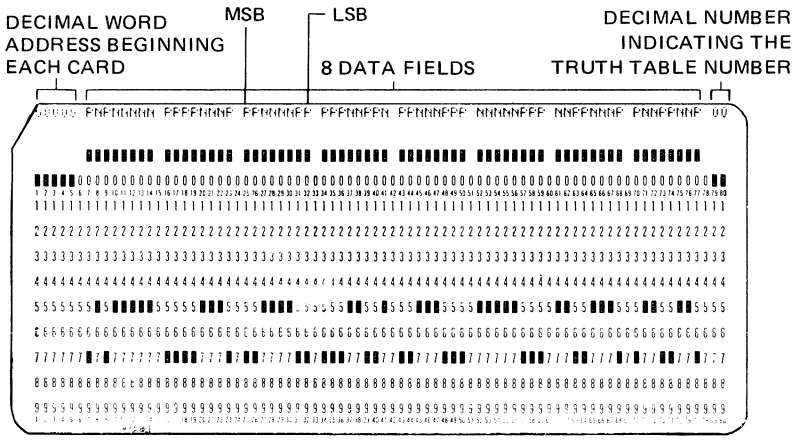
1. Title Card



Column	Data
1	Punch a T
2-5	Blank
6-30	Customer Company Name
31-34	Blank
35-54	Customer's Company Division or location
55-58	Blank
59-63	Customer Part Number
64-67	Blank
68-74	Punch the Intel 4 digit basic part number and in () the number of output bits, e.g. 3604(8).
75-78	Blank
79-80	Punch a 2 digit decimal number to identify the truth table number. The first truth table will be ØØ, second Ø1, third Ø3, etc.

Input Format

2. For a 512 word x 8 bit organization, cards 2 and the following cards should be punched as shown: Each card specifies the 4 bit output of 14 words.



Column	Data
1-5	Punch the 5 digit decimal equivalent of the binary coded location which begins each card. The address is right justified, i.e., ØØØØØ, ØØØØ8, ØØØ16, etc.
6	Blank
7-14	Data Field
15	Blank
16-23	Data Field
24	Blank
25-32	Data Field
33	Blank
34-41	Data Field
42	Blank
43-50	Data Field
51	Blank
52-59	Data Field
60	Blank
61-68	Data Field
69	Blank
70-77	Data Field
78	Blank
79-80	Punch same 2 digit decimal number as in title card.

B. PAPER TAPE FORMAT

The paper tapes which should be used are the:

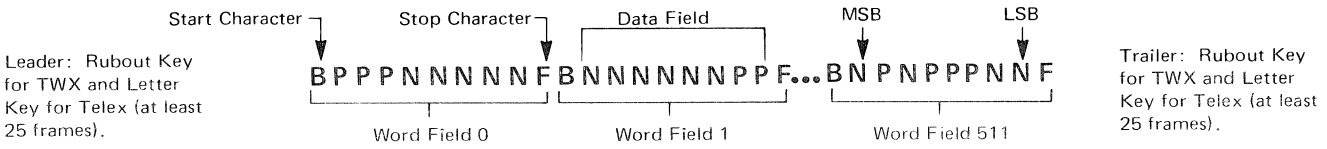
1. 1" wide paper tape using 7 or 8 bit ASCII code, such as a model 33 ASR teletype produces, or the
2. 11/16" wide paper tape using 5 bit Baudot code, such as a Telex produces.

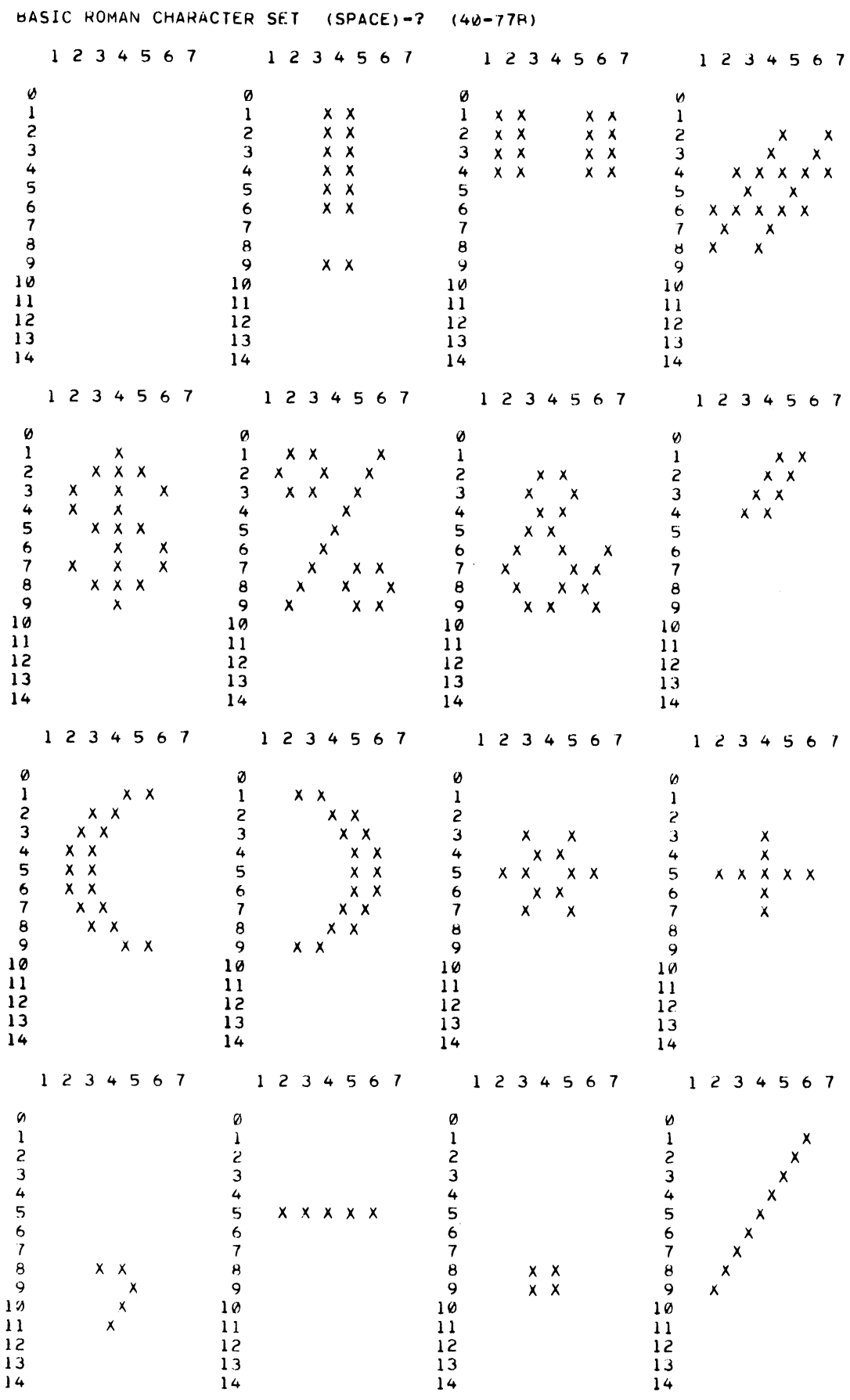
The format requirements are as follows:

1. All word fields are to be punched in consecutive order, starting with word field Ø (all addresses low). There must be exactly 512 word fields for the 512 x 8 PROM organization.
2. Each word field must begin with the start character B and end with the stop character F. There must be exactly 8 or 4 data characters between the B and F for the N x 8 or N x 4 organization respectively.

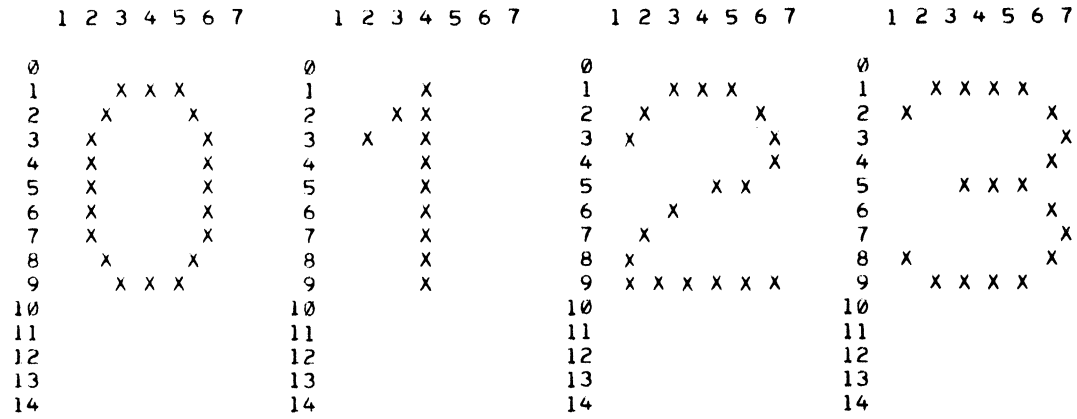
   NO OTHER CHARACTERS, SUCH AS RUBOUTS, ARE ALLOWED ANYWHERE IN A WORD FIELD. If in preparing a tape, an error is made, the entire word field, including the B and F must be rubbed out. Within the word field, a P results in a high level output, and an N results in a low level output.
3. Preceding the first word field and following the last word field, there must be a leader/trailer length of at least 25 characters. This should consist of rubout punches (letter key for Telex tapes)
4. Between word fields, comments not containing B's or F's may be inserted. Carriage return and line feed characters should be inserted (as a "comment") just before each word field (or at least between every four word fields). When these carriage returns, etc. are inserted, the tape may be easily listed on the teletype for purposes of error checking. The customer may also find it helpful to insert the word number (as a comment) at least every four word fields.
5. Included in the tape before the leader should be the customer's complete Telex or TWX number and if more than one pattern is being transmitted, the ROM pattern number.
6. MSB and LSB are the most and least significant bit of the device outputs. Refer to the data sheet for the pin numbers.

Example of 512 x 8 format (N = 512):





APPENDIX E Roman Character Set PROM Listing



BASIC ROMAN CHARACTER SET (SPACE)-? (40-77B)

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HHHHHHHH	LHHLLHHH	LLLHHLLH	HHHHHHHH
2	HHHHHHHH	LHHLLHHH	LLLHHLLH	LHHHLHLH
3	HHHHHHHH	LHHLLHHH	LLLHHLLH	HHHHLHLH
4	HHHHHHHH	LHHLLHHH	LLLHHLLH	LHLLLLLH
5	HHHHHHHH	LHHLLHHH	HHHHHHHH	HHHLHLHH
6	HHHHHHHH	LHHLLHHH	HHHHHHHH	LLLLLLHH
7	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHLHLHHH
8	HHHHHHHH	HHHHHHHH	HHHHHHHH	LLHLHHHH
9	HHHHHHHH	LHHLLHHH	HHHHHHHH	HHHHHHHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HHHHLHHH	HHLLHHLH	HHHHHHHH	LHHHLLHH
2	HHHLLLHH	LLHLHLHH	LHHLLHHH	HHHHLLHH
3	HHLHLHLH	HHLLHLHH	HHHLHLHH	LHHLLHHH
4	HHLHLHHH	LHHHLHHH	LHHLLHHH	HHHLLHHH
5	HHHLLLHH	HHHHLHHH	HHHLLHHH	HHHHHHHH
6	HHHHLHLH	LHHLHHHH	LHLHLHLH	HHHHHHHH
7	HHLHLHLH	HHHHLHLH	HHLHHLLH	HHHHHHHH
8	HHHLLLHH	LHLHLHLH	LHLHLLHH	HHHHHHHH
9	HHHHLHHH	HHLHHLLH	HHHLLHLH	HHHHHHHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	LHHHLLHH	LHLLHHHH	HHHHHHHH	HHHHHHHH
2	HHHLLHHH	HHHHLLHH	HHHHHHHH	HHHHHHHH
3	LHLLHHHH	LHHHLLHH	HHHLHLHH	HHHHLHHH
4	HHLLHHHH	HHHHHLLH	LHHLLHHH	HHHHLHHH
5	HHLLHHHH	HHHHHLLH	HHLLHLLH	HHLLLLLH
6	HHLLHHHH	HHHHHLLH	LHHLLHHH	HHHHLHHH
7	LHLLHHHH	LHHHLLHH	HHHLHLHH	HHHHLHHH
8	HHHLLHHH	HHHHLLHH	HHHHHHHH	HHHHHHHH
9	LHHHLLHH	LHLLHHHH	HHHHHHHH	HHHHHHHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHLH
2	HHHHHHHH	HHHHHHHH	HHHHHHHH	LHHHHLHH
3	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHLHH
4	HHHHHHHH	HHHHHHHH	HHHHHHHH	LHHHLHHH
5	HHHHHHHH	HHLLLLLH	HHHHHHHH	HHHHLHHH
6	HHHHHHHH	HHHHHHHH	HHHHHHHH	LHHLHHHH
7	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHLHHHH
8	LHHLLHHH	HHHHHHHH	LHHLLHHH	LHLHHHHH
9	HHHHHLHH	HHHHHHHH	LHHLLHHH	HHLHHHHH
10	LHHHLHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHLHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

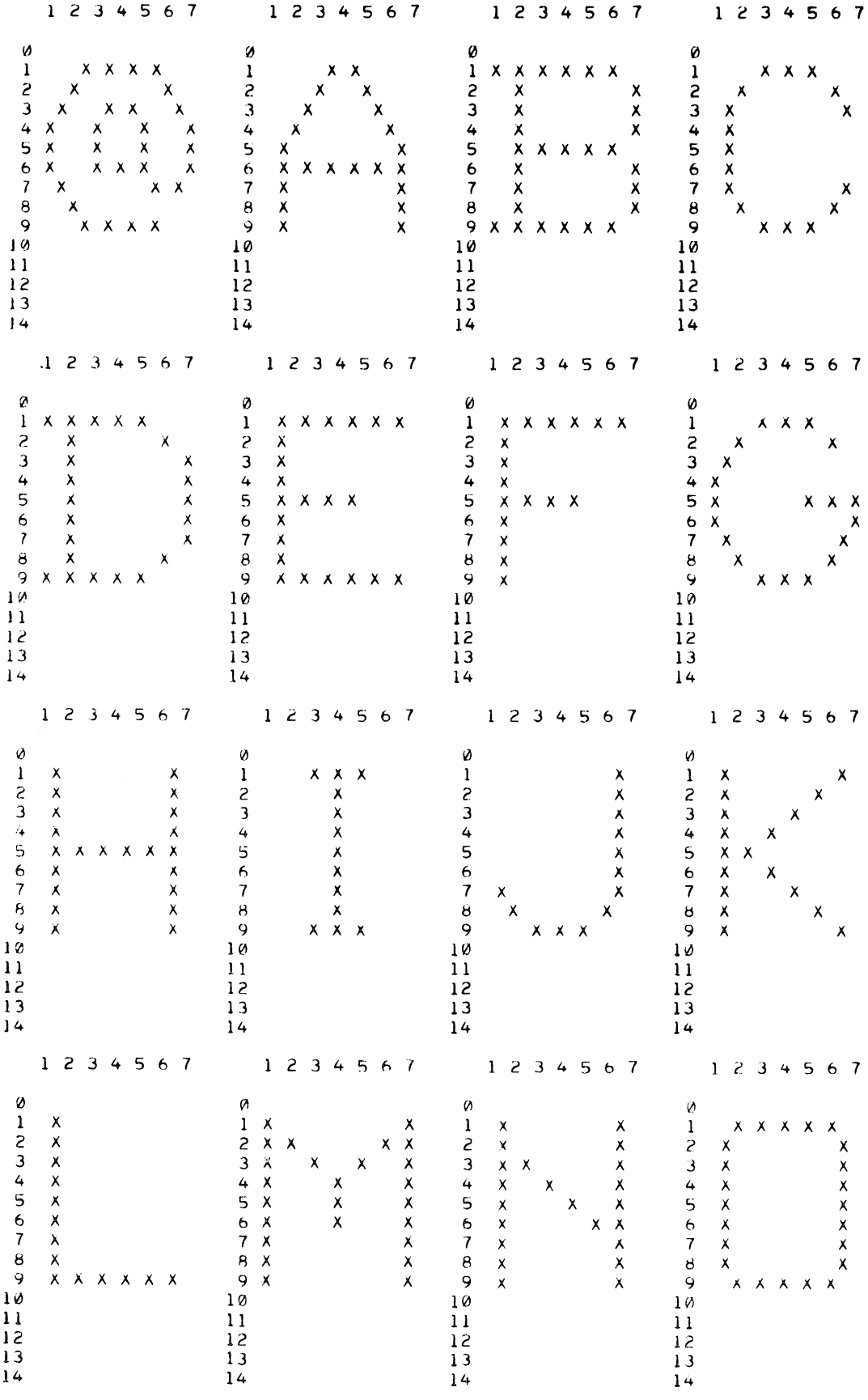
```
   01234567        01234567        01234567        01234567

0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH
1  HHHLLLHH     1  HHHHLHHH     1  HHHLLLHH     1  LHLLLLHH
2  LHLHHLHH     2  HHHLLHHH     2  HHLHHHLH     2  LLHHHHLH
3  HHLHHHLH     3  HHLHLHHH     3  LLHHHHLH     3  HHHHHHHL
4  HHLHHHLH     4  HHHHLHHH     4  LHHHHHLH     4  LHHHHHLH
5  HHLHHHLH     5  HHHHLHHH     5  LHHHLLHH     5  LHHLLLHH
6  HHLHHHLH     6  HHHHLHHH     6  HHHLHHHH     6  LHHHHHLH
7  HHLHHHLH     7  HHHHLHHH     7  HHLHHHHH     7  HHHHHHHL
8  LHLHHLHH     8  HHHHLHHH     8  LLHHHHHH     8  LLHHHHLH
9  HHHLLLHH     9  HHHHLHHH     9  LLLLLLLH     9  LHLLLLHH
10 HHHHHHHH    10 HHHHHHHH    10 HHHHHHHH    10 HHHHHHHH
11 HHHHHHHH    11 HHHHHHHH    11 HHHHHHHH    11 HHHHHHHH
12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH
13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH
14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH
15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH

   01234567        01234567        01234567        01234567

0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH
1  LHHHHLHH     1  LLLLLLLH     1  LHLLLLHH     1  LLLLLLLH
2  LHHHLLHH     2  LLHHHHHH     2  LLHHHHLH     2  LHHHHHLH
3  LHHLHLHH     3  LLHHHHHH     3  HLHHHHHH     3  HHHHHHLH
4  LHLHHLHH     4  LLHHHHHH     4  HLHHHHHH     4  LHHHHLHH
5  LLHHHLHH     5  LLLLLLHH     5  HLHLLLLH     5  HHHHHLHH
6  LLLLLLLH     6  LHHHHHLH     6  HLLHHHHL     6  LHHHLHHH
7  LHHHHLHH     7  LHHHHHLH     7  HLHHHHHL     7  HHHHLHHH
8  LHHHHLHH     8  LLHHHHLH     8  LLHHHHLH     8  LHHLHHHH
9  LHHHHLHH     9  HHLLLLLH     9  LHLLLLHH     9  HHHLHHHH
10 HHHHHHHH    10 HHHHHHHH    10 HHHHHHHH    10 HHHHHHHH
11 HHHHHHHH    11 HHHHHHHH    11 HHHHHHHH    11 HHHHHHHH
12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH
13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH
14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH
15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH

   01234567        01234567        01234567        01234567

0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH
1  LHLLLLHH     1  LHLLLLHH     1  HHHHHHHH     1  HHHHHHHH
2  LLHHHHLH     2  LLHHHHLH     2  HHHHHHHH     2  HHHHHHHH
3  HLHHHHHL     3  HLHHHHHL     3  HHHHHHHH     3  HHHHHHHH
4  LLHHHHLH     4  HLHHHHLL     4  LHHLLHHH     4  LHHLLHHH
5  LHLLLLHH     5  HHLLLLHL     5  LHHLLHHH     5  LHHLLHHH
6  LLHHHHLH     6  HHHHHHHL     6  HHHHHHHH     6  HHHHHHHH
7  HLHHHHHL     7  HHHHHHHL     7  HHHHHHHH     7  HHHHHHHH
8  LLHHHHLH     8  LLHHHHLH     8  LHHLLHHH     8  LHHLLHHH
9  LHLLLLHH     9  LHLLLLHH     9  LHHLLHHH     9  HHHHLHHH
10 HHHHHHHH    10 HHHHHHHH    10 HHHHHHHH    10 LHHHLHHH
11 HHHHHHHH    11 HHHHHHHH    11 HHHHHHHH    11 HHHHLHHH
12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH
13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH
14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH
15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH

   01234567        01234567        01234567        01234567

0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH     0  HHHHHHHH
1  HHHHHHHH     1  HHHHHHHH     1  HHHHHHHH     1  HHHLLLHH
2  HHHHHLLH     2  HHHHHHHH     2  HHLLHHHH     2  HHLHHHLH
3  HHHHLLHH     3  HHHHHHHH     3  HHHLLHHH     3  HHLHHHLH
4  HHHLLHHH     4  HHLLLLLH     4  HHHHLLHH     4  LHHHHLHH
5  HHLLHHHH     5  HHHHHHHH     5  HHHHHLLH     5  LHHHLHHH
6  HHHLLHHH     6  HHLLLLLH     6  HHHHLLHH     6  HHHHLHHH
7  HHHHLLHH     7  HHHHHHHH     7  HHHLLHHH     7  HHHHLHHH
8  HHHHHLLH     8  HHHHHHHH     8  HHLLHHHH     8  HHHHHHHH
9  HHHHHHHH     9  HHHHHHHH     9  HHHHHHHH     9  HHHHLHHH
10 HHHHHHHH    10 HHHHHHHH    10 HHHHHHHH    10 HHHHHHHH
11 HHHHHHHH    11 HHHHHHHH    11 HHHHHHHH    11 HHHHHHHH
12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH    12 HHHHHHHH
13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH    13 HHHHHHHH
14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH    14 HHHHHHHH
15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH    15 HHHHHHHH
```

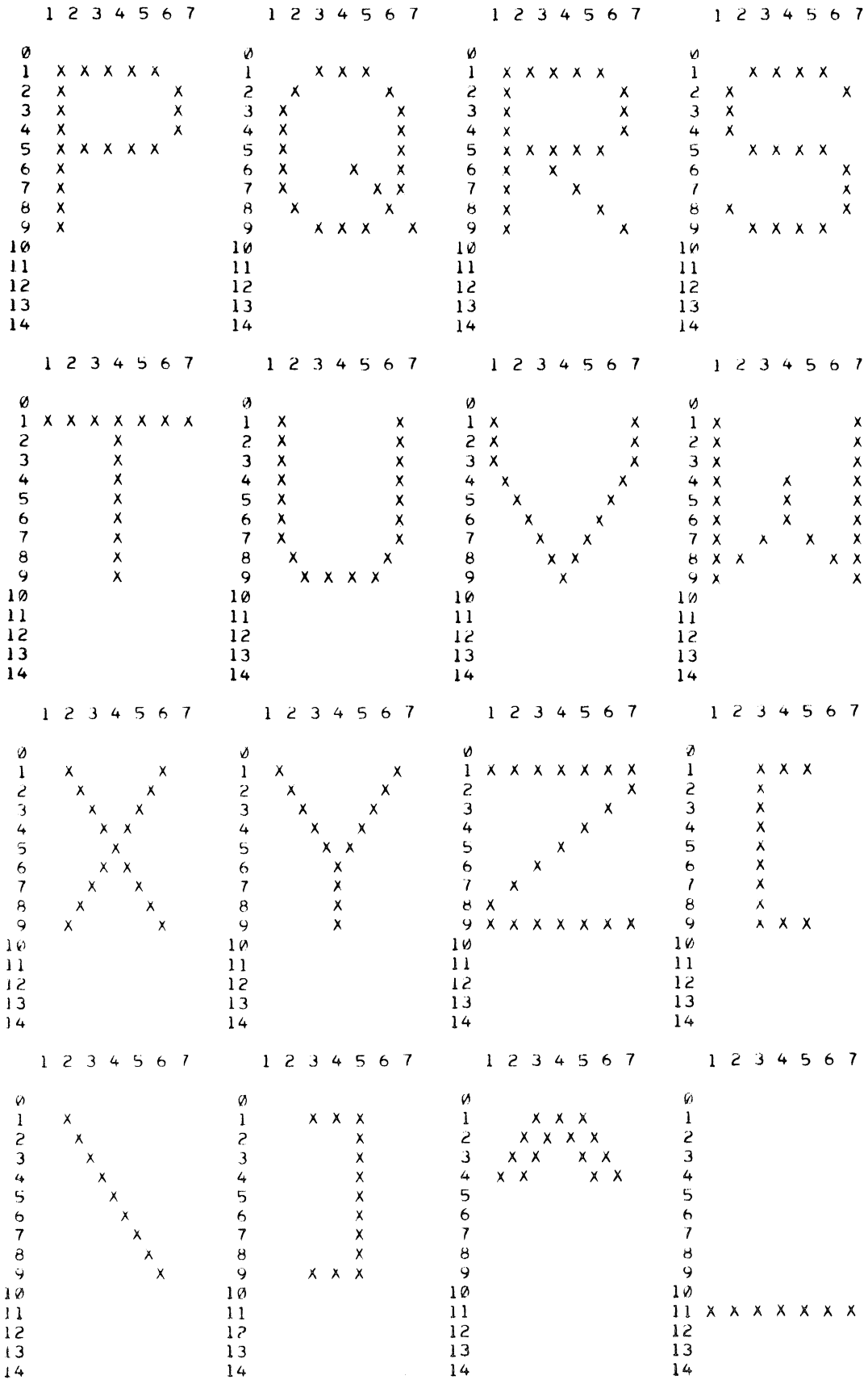
BASIC ROMAN CHARACTER SET
HEWLETT-PACKARD CO.
(SPACE)-? (40-77B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGGG

```
  0-  3  S BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
  4-  7    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
  8- 11    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 12- 15    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 16- 19    BHHHHHHHHF BHHHLLHHLF BHHHLLHHLF BHHHLLHHLF
 20- 23    BHHHLLHHLF BHHHLLHHLF BHHHLLHHLF BHHHHHHHHF
 24- 27    BHHHHHHHHF BHHHLLHHLF BHHHHHHHHF BHHHHHHHHF
 28- 31    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 32- 35    BHHHHHHHHF BHLLHHLLLF BHLLHHLLLF BHLLHHLLLF
 36- 39    BHLLHHLLLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 40- 43    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 44- 47    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 48- 51    BHHHHHHHHF BHHHHHHHHF BHLHLHHHLF BHLHLHHHHF
 52- 55    BHLLLLLHLF BHHLHLHHHF BHHLLLLLLF BHHHLHLHHF
 56- 59    BHHHHLHLLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 60- 63    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 64- 67    BHHHHHHHHF BHHHLHHHHF BHHLLLHHHF BHLHLHLHHF
 68- 71    BHHHLHLHHF BHHLLLHHHF BHLHLHHHHF BHLHLHLHHF
 72- 75    BHHLLLHHHF BHHHLHHHHF BHHHHHHHHF BHHHHHHHHF
 76- 79    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 80- 83    BHHHHHHHHF BHLHHLLHHF BHHLHLHLLF BHHLHLLHHF
 84- 87    BHHHLHHHLF BHHHLHHHHF BHHHHLHHLF BHLLHLHHHF
 88- 91    BHLHLHLHLF BHLLHHLHHF BHHHHHHHHF BHHHHHHHHF
 92- 95    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 96- 99    BHHHHHHHHF BHHHHHHHHF BHHHLLHHLF BHHLHLHHHF
100-103    BHHHLLHHLF BHHHLLHHHF BHLHLHLHLF BHLLHHLHHF
104-107    BHHLLHLHLF BHLHLLHHHF BHHHHHHHHF BHHHHHHHHF
108-111    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
112-115    BHHHHHHHHF BHHLLHHHLF BHHLLHHHHF BHHHLLHHLF
116-119    BHHHLLHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
120-123    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
124-127    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
128-131    BHHHHHHHHF BHHLLHHHLF BHHHLLHHHF BHHHHLLHLF
132-135    BHHHHLLHHF BHHHHLLHHF BHHHHLLHHF BHHHHLLHLF
136-139    BHHHLLHHHF BHHLLHHHLF BHHHHHHHHF BHHHHHHHHF
140-143    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
144-147    BHHHHHHHHF BHHHHLLHLF BHHLLHHHHF BHHLLHHHLF
148-151    BHLLHHHHHF BHLLHHHHHF BHLLHHHHHF BHHLLHHHLF
152-155    BHHLLHHHHF BHHHHLLHLF BHHHHHHHHF BHHHHHHHHF
156-159    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
160-163    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHLHLHHHF
164-167    BHHHLLHHLF BHLLHLLHHF BHHHLLHHLF BHHLHLHHHF
168-171    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
172-175    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
176-179    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHLHHHHF
180-183    BHHHLHHHHF BHLLLLLHHF BHHHLHHHHF BHHHLHHHHF
184-187    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
188-191    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
192-195    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
196-199    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
200-203    BHHHLLHHLF BHHLHHHHHF BHHHLHHHLF BHHHLHHHHF
204-207    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
208-211    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
212-215    BHHHHHHHHF BHLLLLLHHF BHHHHHHHHF BHHHHHHHHF
216-219    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
220-223    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
224-227    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
228-231    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
232-235    BHHHLLHHLF BHHHLLHHLF BHHHHHHHHF BHHHHHHHHF
236-239    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
240-243    BHHHHHHHHF BHLHHHHHHF BHHLHHHHLF BHHLHHHHHF
244-247    BHHHLHHHLF BHHHLHHHHF BHHHHLHHLF BHHHHLHHHF
248-251    BHHHHHLHLF BHHHHHLHHF BHHHHHHHHF BHHHHHHHHF
252-255    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
```

256-259	BHHHHHHHHF	BHHLLLHHHF	BHHLHHLHLF	BHLHHHLHHF
260-263	BHLHHHLHHF	BHLHHHLHHF	BHLHHHLHHF	BHLHHHLHHF
264-267	BHHLHHLHLF	BHHLLLHHHF	BHHHHHHHHF	BHHHHHHHHF
268-271	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
272-275	BHHHHHHHHF	BHHHLHHHHF	BHHHLLHHHF	BHHHLHLHHF
276-279	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
280-283	BHHHLHHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
284-287	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
288-291	BHHHHHHHHF	BHHLLLHHHF	BHLHHHLHHF	BHLHHHHLLF
292-295	BHLHHHHHLF	BHHLLHHHLF	BHHHHLHHHF	BHHHHHLHHF
296-299	BHHHHHHLLF	BHLLLLLLLF	BHHHHHHHHF	BHHHHHHHHF
300-303	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
304-307	BHHHHHHHHF	BHHLLLLHLF	BHLHHHHLLF	BLHHHHHHHF
308-311	BHLHHHHHLF	BHHLLLHHLF	BHLHHHHHLF	BLHHHHHHHF
312-315	BHLHHHHLLF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
316-319	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
320-323	BHHHHHHHHF	BHHLHHHHLF	BHHLLHHHLF	BHHLHLHHLF
324-327	BHHLHHLHLF	BHHLHHHLLF	BHLLLLLLLF	BHHLHHHHLF
328-331	BHHLHHHHLF	BHHLHHHHLF	BHHHHHHHHF	BHHHHHHHHF
332-335	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
336-339	BHHHHHHHHF	BHLLLLLLLF	BHHHHHHLLF	BHHHHHHLLF
340-343	BHHHHHHLLF	BHHLLLLLLF	BHLHHHHHLF	BHLHHHHHLF
344-347	BHLHHHHLLF	BHLLLLLHHF	BHHHHHHHHF	BHHHHHHHHF
348-351	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
352-355	BHHHHHHHHF	BHHLLLLHLF	BHLHHHHLLF	BHHHHHHLHF
356-359	BHHHHHHLHF	BHLLLLHLHF	BLHHHHLLHF	BLHHHHHLHF
360-363	BHLHHHHLLF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
364-367	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
368-371	BHHHHHHHHF	BHLLLLLLLF	BHLHHHHHLF	BHLHHHHHHF
372-375	BHHLHHHHLF	BHHLHHHHHF	BHHHLHHHLF	BHHHLHHHHF
376-379	BHHHHLHHLF	BHHHHLHHHF	BHHHHHHHHF	BHHHHHHHHF
380-383	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
384-387	BHHHHHHHHF	BHHLLLLHLF	BHLHHHHLLF	BLHHHHHLHF
388-391	BHLHHHHLLF	BHHLLLLHLF	BHLHHHHLLF	BLHHHHHLHF
392-395	BHLHHHHLLF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
396-399	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
400-403	BHHHHHHHHF	BHHLLLLHLF	BHLHHHHLLF	BLHHHHHLHF
404-407	BLLHHHHLHF	BLHLLLLHHF	BLHHHHHHHF	BLHHHHHHHF
408-411	BHLHHHHLLF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
412-415	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
416-419	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
420-423	BHHHLLHHLF	BHHHLLHHLF	BHHHHHHHHF	BHHHHHHHHF
424-427	BHHHLLHHLF	BHHHLLHHLF	BHHHHHHHHF	BHHHHHHHHF
428-431	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
432-435	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
436-439	BHHHLLHHLF	BHHHLLHHLF	BHHHHHHHHF	BHHHHHHHHF
440-443	BHHHLLHHLF	BHHLHHHHHF	BHHHLHHHLF	BHHHLHHHHF
444-447	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
448-451	BHHHHHHHHF	BHHHHHHHHF	BHLLHHHHHF	BHHLLHHHHF
452-455	BHHHLLHHHF	BHHHHLLHHF	BHHHLLHHHF	BHHLLHHHHF
456-459	BHLLHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
460-463	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
464-467	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
468-471	BHLLLLLHHF	BHHHHHHHHF	BHLLLLLHHF	BHHHHHHHHF
472-475	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
476-479	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
480-483	BHHHHHHHHF	BHHHHHHHHF	BHHHHLLHHF	BHHHLLHHHF
484-487	BHHLLHHHHF	BHLLHHHHHF	BHHLLHHHHF	BHHHLLHHHF
488-491	BHHHHLLHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
492-495	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
496-499	BHHHHHHHHF	BHHLLLHHHF	BHLHHHLHHF	BHLHHHLHHF
500-503	BHHLHHHHLF	BHHHLHHHLF	BHHHLHHHHF	BHHHLHHHHF
504-507	BHHHHHHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
508-511	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF E

BASIC ROMAN CHARACTER SET @-(UNDERLINE) (100-137B)





BASIC ROMAN CHARACTER SET @-(UNDERLINE) (100-137B)

```
   01234567          01234567          01234567          01234567

 0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH
 1 LHLLLLHH        1 LHHLLHHH        1 HLLLLLLH        1 HHHLLLHH
 2 HHLHHHLH        2 HHHLHLHH        2 HHLHHHHL        2 HHLHHHLH
 3 LLHLLHLH        3 LHLHHLHH        3 HHLHHHHL        3 LLHHHHLH
 4 HLHLHLHL        4 HHLHHHLH        4 HHLHHHHL        4 LLHHHHHH
 5 HLHLHLHL        5 LLHHHHLH        5 HHLLLLLH        5 LLHHHHHH
 6 HLHLLLHL        6 LLLLLLLH        6 HHLHHHHL        6 LLHHHHHH
 7 LLHHHLLH        7 LLHHHHLH        7 HHLHHHHL        7 LLHHHHLH
 8 HHLHHHHH        8 LLHHHHLH        8 HHLHHHHL        8 HHLHHHLH
 9 LHLLLLHH        9 LLHHHHLH        9 HLLLLLLH        9 HHHLLLHH
10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH
11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH
12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH
13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH
14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH
15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH

   01234567          01234567          01234567          01234567

 0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH
 1 HLLLLLHH        1 LLLLLLLH        1 LLLLLLLH        1 HHHLLLHH
 2 HHLHHHLH        2 LLHHHHHH        2 LLHHHHHH        2 HHLHHHLH
 3 HHLHHHHL        3 LLHHHHHH        3 LLHHHHHH        3 LLHHHHHH
 4 HHLHHHHL        4 LLHHHHHH        4 LLHHHHHH        4 HLHHHHHH
 5 HHLHHHHL        5 LLLLLHHH        5 LLLLLHHH        5 HLHHHLLL
 6 HHLHHHHL        6 LLHHHHHH        6 LLHHHHHH        6 HLHHHHHL
 7 HHLHHHHL        7 LLHHHHHH        7 LLHHHHHH        7 LLHHHHLH
 8 HHLHHHLH        8 LLHHHHHH        8 LLHHHHHH        8 HHLHHHLH
 9 HLLLLLHH        9 LLLLLLLH        9 LLHHHHHH        9 HHHLLLHH
10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH
11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH
12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH
13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH
14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH
15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH

   01234567          01234567          01234567          01234567

 0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH
 1 LLHHHHLH        1 HHHLLLHH        1 LHHHHHLH        1 LLHHHHLH
 2 LLHHHHLH        2 HHHHLHHH        2 LHHHHHLH        2 LLHHHLHH
 3 LLHHHHLH        3 HHHHLHHH        3 LHHHHHLH        3 LLHHLHHH
 4 LLHHHHLH        4 HHHHLHHH        4 LHHHHHLH        4 LLHLHHHH
 5 LLLLLLLH        5 HHHHLHHH        5 LHHHHHLH        5 LLLHHHHH
 6 LLHHHHLH        6 HHHHLHHH        6 LHHHHHLH        6 LLHLHHHH
 7 LLHHHHLH        7 HHHHLHHH        7 LLHHHHLH        7 LLHHLHHH
 8 LLHHHHLH        8 HHHHLHHH        8 HHLHHHLH        8 LLHHHHLH
 9 LLHHHHLH        9 HHHLLLHH        9 HHHLLLHH        9 LLHHHHLH
10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH
11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH
12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH
13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH
14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH
15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH

   01234567          01234567          01234567          01234567

 0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH        0 HHHHHHHH
 1 LLHHHHHH        1 HLHHHHHL        1 LLHHHHLH        1 HHLLLLLH
 2 LLHHHHHH        2 HLLHHHLL        2 LLHHHHLH        2 LLHHHHLH
 3 LLHHHHHH        3 HLHLHLHL        3 LLLHHHLH        3 LLHHHHLH
 4 LLHHHHHH        4 HLHHLHHL        4 LLHLHHLH        4 LLHHHHLH
 5 LLHHHHHH        5 HLHHLHHL        5 LLHHLHLH        5 LLHHHHLH
 6 LLHHHHHH        6 HLHHLHHL        6 LLHHHLLH        6 LLHHHHLH
 7 LLHHHHHH        7 HLHHHHHL        7 LLHHHHLH        7 LLHHHHLH
 8 LLHHHHHH        8 HLHHHHHL        8 LLHHHHLH        8 LLHHHHLH
 9 LLLLLLLH        9 HLHHHHHL        9 LLHHHHLH        9 HHLLLLLH
10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH       10 HHHHHHHH
11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH       11 HHHHHHHH
12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH       12 HHHHHHHH
13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH       13 HHHHHHHH
14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH       14 HHHHHHHH
15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH       15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 LLLLLLHH
 2 LLHHHHLH
 3 LLHHHHLH
 4 LLHHHHLH
 5 LLLLLLHH
 6 LLHHHHHH
 7 LLHHHHHH
 8 LLHHHHHH
 9 LLHHHHHH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 HHHLLLHH
 2 HHLHHHLH
 3 LLHHHHLH
 4 LLHHHHLH
 5 LLHHHHLH
 6 LLHHLHLH
 7 LLHHHLLH
 8 HHLHHHLH
 9 HHHLLLHL
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 LLHHHHLH
 2 HLHHHHHL
 3 HLHHHHHL
 4 LLHHHHLH
 5 HHLHHHLH
 6 LHLHHLHH
 7 HHHLHLHH
 8 LHHLLHHH
 9 HHHHLHHH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 HLHHHHHL
 2 HLHHHHHL
 3 HLHHHHHL
 4 HLHHLHHL
 5 HLHHLHHL
 6 HLHHLHHL
 7 HLHLHLHL
 8 HLLHHHLL
 9 HLHHHHHL
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 HHLHHHLH
 2 LHLHHLHH
 3 HHHLHLHH
 4 LHHLLHHH
 5 HHHHLHHH
 6 LHHLLHHH
 7 HHHLHLHH
 8 LHLHHLHH
 9 HHLHHHLH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 LLHHHHLH
 2 HHLHHHLH
 3 LHLHHLHH
 4 HHHLHLHH
 5 LHHLLHHH
 6 HHHHLHHH
 7 HHHHLHHH
 8 HHHHLHHH
 9 HHHHLHHH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 HLLLLLLL
 2 HHHHHHHL
 3 HHHHHHLH
 4 HHHHHLHH
 5 HHHHLHHH
 6 HHHLHHHH
 7 HHLHHHHH
 8 HLHHHHHH
 9 HLLLLLLL
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
```

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   01234567
 0 HHHHHHHH
 1 HHHLLLHH
 2 HHHLHHHH
 3 HHHLHHHH
 4 HHHLHHHH
 5 HHHLHHHH
 6 HHHLHHHH
 7 HHHLHHHH
 8 HHHLHHHH
 9 HHHLLLHH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
```

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   01234567
 0 HHHHHHHH
 1 HHLHHHHH
 2 LHLHHHHH
 3 HHHLHHHH
 4 LHHLHHHH
 5 HHHHLHHH
 6 LHHHLHHH
 7 HHHHHLHH
 8 LHHHHLHH
 9 HHHHHHLH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
```

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   01234567
 0 HHHHHHHH
 1 HHHLLLHH
 2 HHHHHHLH
 3 HHHHHLHH
 4 HHHHHLHH
 5 HHHHHLHH
 6 HHHHHLHH
 7 HHHHHLHH
 8 HHHHHLHH
 9 HHHLLLHH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
```

```
   01234567
 0 HHHHHHHH
 1 LHLLLLHH
 2 LHLLLLHH
 3 HHLLHLLH
 4 LLLHHLLH
 5 HHHHHHHH
 6 HHHHHHHH
 7 HHHHHHHH
 8 HHHHHHHH
 9 HHHHHHHH
10 HHHHHHHH
11 HHHHHHHH
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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   01234567
 0 HHHHHHHH
 1 HHHHHHHH
 2 HHHHHHHH
 3 HHHHHHHH
 4 HHHHHHHH
 5 HHHHHHHH
 6 HHHHHHHH
 7 HHHHHHHH
 8 HHHHHHHH
 9 HHHHHHHH
10 HHHHHHHH
11 HLLLLLLL
12 HHHHHHHH
13 HHHHHHHH
14 HHHHHHHH
15 HHHHHHHH
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BASIC ROMAN CHARACTER SET
HEWLETT-PACKARD CO.
@-(UNDERLINE)  (100-137B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGG
  0-  3  S BHHHHHHHHHF BHHLLLLLHLF BHLHHHLHHF BHLHLLHLLF
  4-  7    BLHLHLHLHF BLHLHLHLHF BLHLLLHLHF BHLLHHHLLF
  8- 11    BHHHHHLHHF BHHLLLLLHLF BHHHHHHHHF BHHHHHHHHF
 12- 15    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 16- 19    BHHHHHHHHF BHHHLLHHLF BHHLHLHHHF BHHLHHLHLF
 20- 23    BHLHHHLHHF BHLHHHHLLF BHLLLLLLLF BHLHHHHLLF
 24- 27    BHLHHHHLLF BHLHHHHLLF BHHHHHHHHF BHHHHHHHHF
 28- 31    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 32- 35    BHHHHHHHHF BHLLLLLLHF BLHHHHLHHF BLHHHHLHHF
 36- 39    BLHHHHLHHF BHLLLLLHHF BLHHHHLHHF BLHHHHLHHF
 40- 43    BLHHHHLHHF BHLLLLLLHF BHHHHHHHHF BHHHHHHHHF
 44- 47    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 48- 51    BHHHHHHHHF BHHLLLHHHF BHLHHHLHHF BHLHHHHLLF
 52- 55    BHHHHHHLLF BHHHHHHLLF BHHHHHHLLF BHLHHHHLLF
 56- 59    BHLHHHLHHF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
 60- 63    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 64- 67    BHHHHHHHHF BHHLLLLLHF BHLHHHLHHF BLHHHHLHHF
 68- 71    BLHHHHLHHF BLHHHHLHHF BLHHHHLHHF BLHHHHLHHF
 72- 75    BHLHHHLHHF BHHLLLLLHF BHHHHHHHHF BHHHHHHHHF
 76- 79    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 80- 83    BHHHHHHHHF BHLLLLLLLF BHHHHHHLLF BHHHHHHLLF
 84- 87    BHHHHHHLLF BHHHLLLLLF BHHHHHHLLF BHHHHHHLLF
 88- 91    BHHHHHHLLF BHLLLLLLLF BHHHHHHHHF BHHHHHHHHF
 92- 95    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 96- 99    BHHHHHHHHF BHLLLLLLLF BHHHHHHLLF BHHHHHHLLF
100-103    BHHHHHHLLF BHHHLLLLLF BHHHHHHLLF BHHHHHHLLF
104-107    BHHHHHHLLF BHHHHHHLLF BHHHHHHHHF BHHHHHHHHF
108-111    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
112-115    BHHHHHHHHF BHHLLLHHHF BHLHHHLHHF BHHHHHHLLF
116-119    BHHHHHHLHF BLLLHHHLHF BLHHHHHLHF BHLHHHHLLF
120-123    BHLHHHLHHF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
124-127    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
128-131    BHHHHHHHHF BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF
132-135    BHLHHHHLLF BHLLLLLLLF BHLHHHHLLF BHLHHHHLLF
136-139    BHLHHHHLLF BHLHHHHLLF BHHHHHHHHF BHHHHHHHHF
140-143    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
144-147    BHHHHHHHHF BHHLLLHHHF BHHHLHHHHF BHHHLHHHHF
148-151    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
152-155    BHHHLHHHHF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
156-159    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
160-163    BHHHHHHHHF BHLHHHHHLF BHLHHHHHLF BHLHHHHHLF
164-167    BHLHHHHHLF BHLHHHHHLF BHLHHHHHLF BHLHHHHLLF
168-171    BHLHHHLHHF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
172-175    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
176-179    BHHHHHHHHF BHLHHHHLLF BHHLHHHLLF BHHHLHHLLF
180-183    BHHHHLHLLF BHHHHHLLLF BHHHHLHLLF BHHHLHHLLF
184-187    BHHLHHHLLF BHLHHHHLLF BHHHHHHHHF BHHHHHHHHF
188-191    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
192-195    BHHHHHHHHF BHHHHHHLLF BHHHHHHLLF BHHHHHHLLF
196-199    BHHHHHHLLF BHHHHHHLLF BHHHHHHLLF BHHHHHHLLF
200-203    BHHHHHHLLF BHLLLLLLLF BHHHHHHHHF BHHHHHHHHF
204-207    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
208-211    BHHHHHHHHF BLHHHHHLHF BLLHHHLLHF BLHLHLHLHF
212-215    BLHHLHHLHF BLHHLHHLHF BLHHLHHLHF BLHHHHHLHF
216-219    BLHHHHHLHF BLHHHHHLHF BHHHHHHHHF BHHHHHHHHF
220-223    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
224-227    BHHHHHHHHF BHLHHHHLLF BHLHHHHLLF BHLHHHLLLF
228-231    BHLHHLHLLF BHLHLHHLLF BHLLHHHLLF BHLHHHHLLF
232-235    BHLHHHHLLF BHLHHHHLLF BHHHHHHHHF BHHHHHHHHF
236-239    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
240-243    BHHHHHHHHF BHLLLLLHHF BHLHHHHLLF BHLHHHHLLF
244-247    BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF
248-251    BHLHHHHLLF BHLLLLLHHF BHHHHHHHHF BHHHHHHHHF
252-255    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
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256-259    BHHHHHHHHF BHHLLLLLLF BHLHHHHLLF BHLHHHHLLF
260-263    BHLHHHHLLF BHHLLLLLLF BHHHHHHLLF BHHHHHHLLF
264-267    BHHHHHHLLF BHHHHHHLLF BHHHHHHHHF BHHHHHHHHF
268-271    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
272-275    BHHHHHHHHF BHHLLLHHHF BHLHHHLHHF BHLHHHHLLF
276-279    BHLHHHHLLF BHLHHHHLLF BHLHLHHLLF BHLLHHHLLF
280-283    BHLHHHLHHF BLHLLLHHHF BHHHHHHHHF BHHHHHHHHF
284-287    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
288-291    BHHHHHHHHF BHHLLLLLLF BHLHHHHLLF BHLHHHHLLF
292-295    BHLHHHHLLF BHHLLLLLLF BHHHHLHLLF BHHHLHHLLF
296-299    BHHLHHHLLF BHLHHHHLLF BHHHHHHHHF BHHHHHHHHF
300-303    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
304-307    BHHHHHHHHF BHHLLLLHLF BHLHHHHLLF BHHHHHHLLF
308-311    BHHHHHHLLF BHHLLLLHLF BHLHHHHHLF BHLHHHHHLF
312-315    BHLHHHHLLF BHHLLLLHLF BHHHHHHHHF BHHHHHHHHF
316-319    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
320-323    BHHHHHHHHF BLLLLLLLHF BHHHLHHHHF BHHHLHHHHF
324-327    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
328-331    BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF BHHHHHHHHF
332-335    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
336-339    BHHHHHHHHF BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF
340-343    BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF
344-347    BHLHHHLHHF BHHLLLLHLF BHHHHHHHHF BHHHHHHHHF
348-351    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
352-355    BHHHHHHHHF BLHHHHHLHF BLHHHHHLHF BLHHHHHLHF
356-359    BHLHHHHLLF BHLHHHLHHF BHHLHHLHLF BHHLHLHHHF
360-363    BHHHLLHHLF BHHHLHHHHF BHHHHHHHHF BHHHHHHHHF
364-367    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
368-371    BHHHHHHHHF BLHHHHHLHF BLHHHHHLHF BLHHHHHLHF
372-375    BLHHLHHLHF BLHHLHHLHF BLHHLHHLHF BLHLHLHLHF
376-379    BLLHHHLLHF BLHHHHHLHF BHHHHHHHHF BHHHHHHHHF
380-383    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
384-387    BHHHHHHHHF BHLHHHLHHF BHHLHHLHLF BHHLHLHHHF
388-391    BHHHLLHHLF BHHHLHHHHF BHHHLLHHLF BHHLHLHHHF
392-395    BHHLHHLHLF BHLHHHLHHF BHHHHHHHHF BHHHHHHHHF
396-399    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
400-403    BHHHHHHHHF BHLHHHHLLF BHLHHHLHHF BHHLHHLHLF
404-407    BHHLHLHHHF BHHHLLHHLF BHHHLHHHHF BHHHLHHHHF
408-411    BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF BHHHHHHHHF
412-415    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
416-419    BHHHHHHHHF BLLLLLLLHF BLHHHHHHHF BHLHHHHHHF
420-423    BHHLHHHHHF BHHHLHHHHF BHHHHLHHHF BHHHHHLHHF
424-427    BHHHHHHLHF BLLLLLLLHF BHHHHHHHHF BHHHHHHHHF
428-431    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
432-435    BHHHHHHHHF BHHLLLHHHF BHHHHLHHHF BHHHHLHHHF
436-439    BHHHHLHHHF BHHHHLHHHF BHHHHLHHHF BHHHHLHHHF
440-443    BHHHHLHHHF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
444-447    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
448-451    BHHHHHHHHF BHHHHHLHHF BHHHHHLHLF BHHHHLHHHF
452-455    BHHHHLHHLF BHHHLHHHHF BHHHLHHHLF BHHLHHHHHF
456-459    BHHLHHHHLF BHLHHHHHHF BHHHHHHHHF BHHHHHHHHF
460-463    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
464-467    BHHHHHHHHF BHHLLLHHHF BHHLHHHHHF BHHLHHHHHF
468-471    BHHLHHHHHF BHHLHHHHHF BHHLHHHHHF BHHLHHHHHF
472-475    BHHLHHHHHF BHHLLLLHHF BHHHHHHHHF BHHHHHHHHF
476-479    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
480-483    BHHHHHHHHF BHHLLLHHHF BHHLLLLHLF BHLLHLLHHF
484-487    BHLLHHLLLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
488-491    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
492-495    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
496-499    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
500-503    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
504-507    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLHF
508-511    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF E
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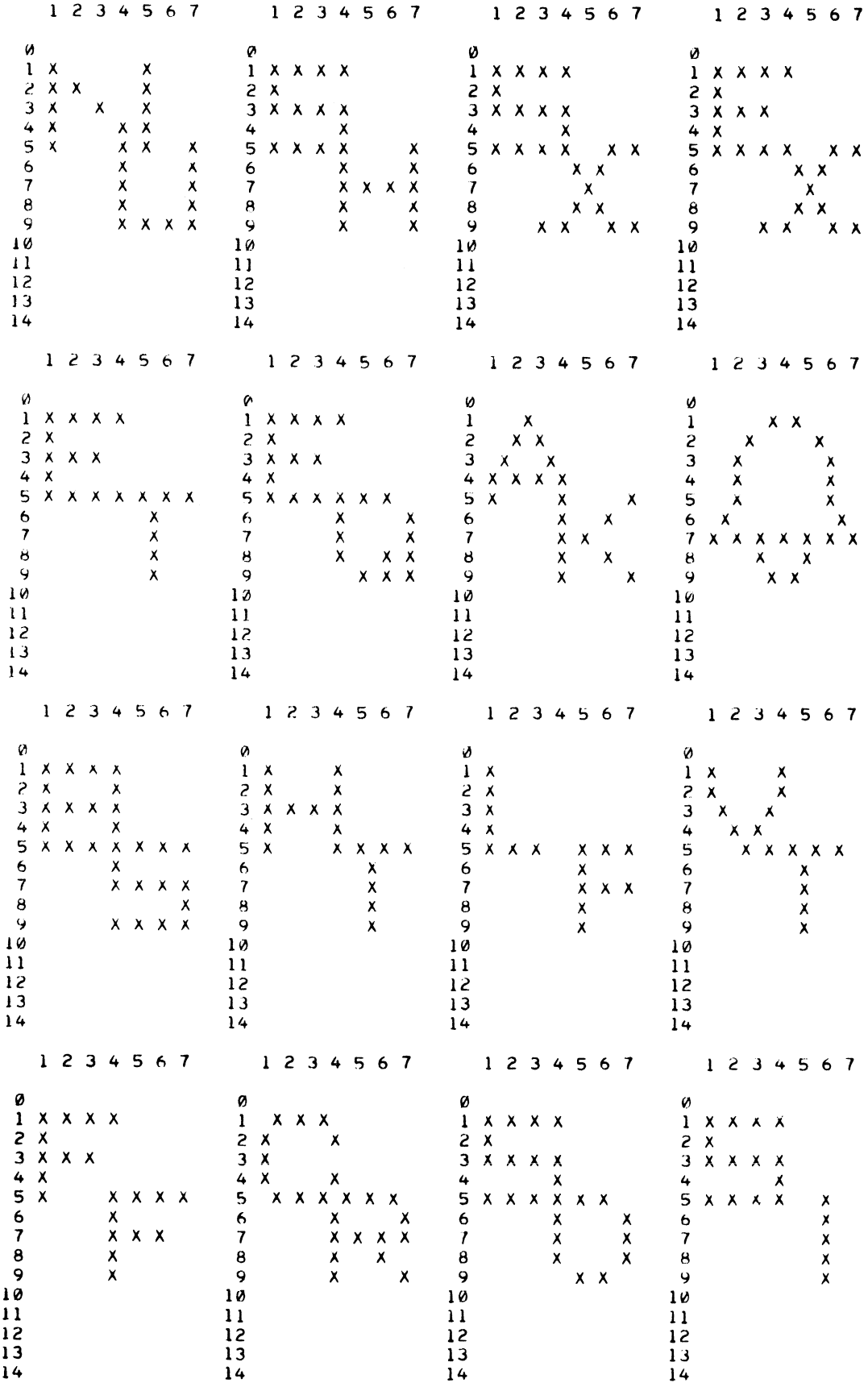
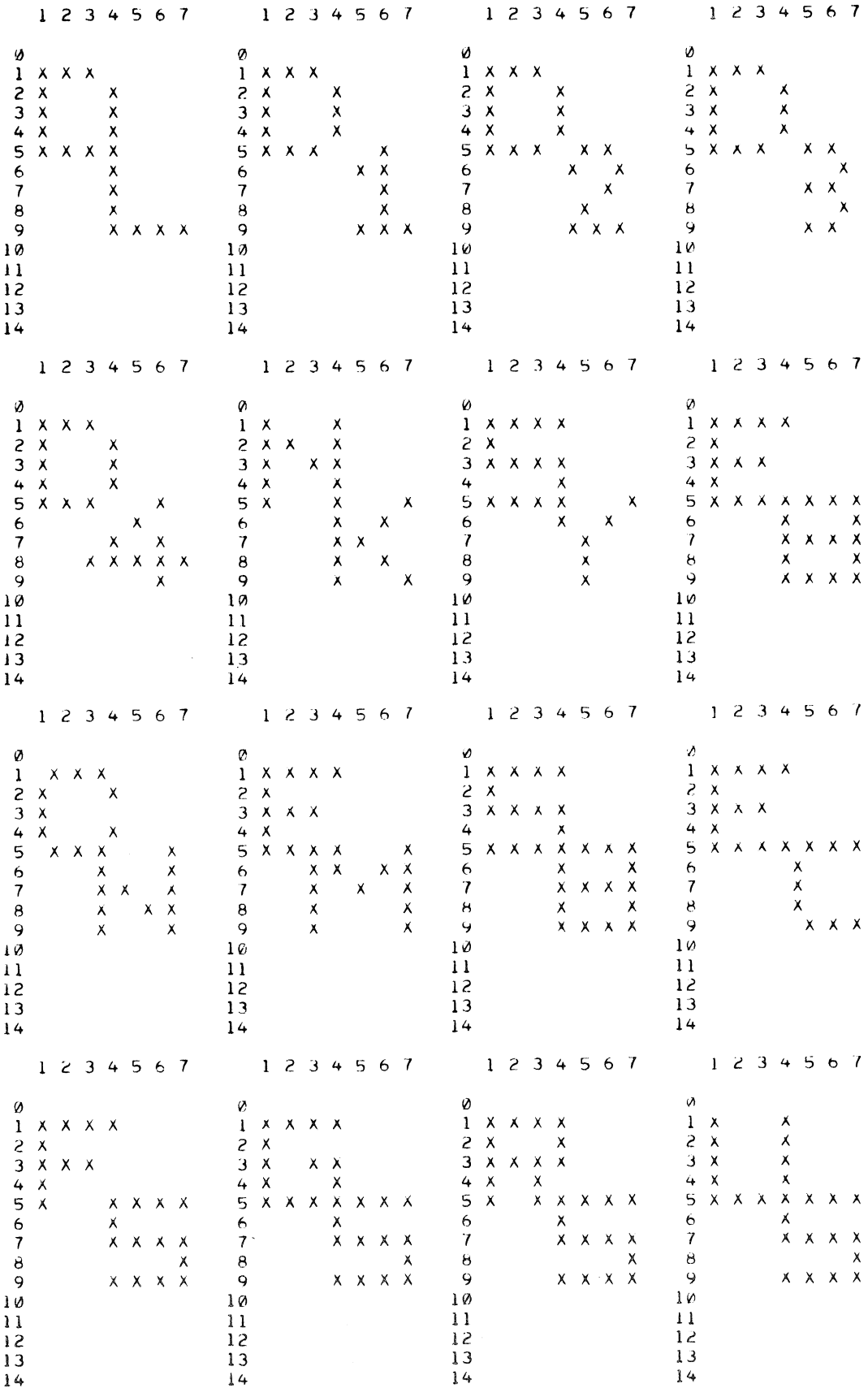
EXTENDED ROMAN CHARACTER SET, NULL-US (00-37B)





EXTENDED ROMAN CHARACTER SET, NULL-US (00-37B)

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HLHHHLHH	HLLLLHHH	HLLLLHHH	HLLLLHHH
2	HLLHHLHH	HLHHHHHH	HLHHHHHH	HLHHHHHH
3	HLHLHLHH	HLLLLHHH	HLLLLHHH	HLLLHHHH
4	HLHHLLHH	HHHHLHHH	HHHHLHHH	HLHHHHHH
5	HLHHLLHL	HLLLLHHL	HLLLLHLL	HLLLLHLL
6	HHHHLHHL	HHHHLHHL	LHHHLLHH	LHHHLLHH
7	HHHHLHHL	HHHHLLLL	HHHHHLHH	HHHHHLHH
8	HHHHLHHL	HHHHLHHL	LHHHLLHH	LHHHLLHH
9	HHHHLLLL	HHHHLHHL	HHHLLHLL	HHHLLHLL
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HLLLLHHH	HLLLLHHH	LHLHHHHH	LHHLLHHH
2	HLHHHHHH	HLHHHHHH	HHLLHHHH	LHLHHLHH
3	HLLLHHHH	HLLLHHHH	LLHLHHHH	HHLHHHLH
4	HLHHHHHH	HLHHHHHH	HLLLLHHH	HHLHHHLH
5	HLLLLLLL	HLLLLLLH	HLHHLHHL	HHLHHHLH
6	LHHHHLHH	HHHHLHHL	HHHHLHLH	LLHHHHLH
7	LHHHHLHH	HHHHLHHL	HHHHLLHH	HLLLLLLL
8	LHHHHLHH	HHHHLHLL	HHHHLHLH	HHHLHLHH
9	LHHHHLHH	HHHHHLLL	HHHHLHHL	LHHLLHHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HLLLLHHH	HLHHLHHH	HLHHHHHH	HLHHLHHH
2	HLHHLHHH	HLHHLHHH	HLHHHHHH	HLHHLHHH
3	HLLLLHHH	HLLLLHHH	HLHHHHHH	LLHLHHHH
4	HLHHLHHH	HLHHLHHH	HLHHHHHH	HHLLHHHH
5	HLLLLLLL	HLHHLLLL	HLLLHLLL	LHLLLLLH
6	HHHHLHHH	LHHHHLHH	HHHHHLHH	HHHHHLHH
7	HHHHLLLL	LHHHHLHH	HHHHHLLL	HHHHHLHH
8	HHHHHHHL	LHHHHLHH	HHHHHLHH	HHHHHLHH
9	HHHHLLLL	LHHHHLHH	HHHHHLHH	HHHHHLHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HLLLLHHH	LLLLHHHH	HLLLLHHH	HLLLLHHH
2	HLHHHHHH	HLHHLHHH	HLHHHHHH	HLHHHHHH
3	HLLLHHHH	HLHHHHHH	HLLLLHHH	HLLLLHHH
4	HLHHHHHH	HLHHLHHH	HHHHLHHH	HHHHLHHH
5	HLHHLLLL	LLLLLLLH	HLLLLLLH	HLLLLHLH
6	HHHHLHHH	HHHHLHHL	HHHHLHHL	HHHHHHLH
7	HHHHLLLH	HHHHLLLL	HHHHLHHL	HHHHHHLH
8	HHHHLHHH	HHHHLHLH	HHHHLHHL	HHHHHHLH
9	HHHHLHHH	HHHHLHHL	HHHHHLLH	HHHHHHLH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

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   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 HLLLHHHH      1 HLLLHHHH      1 HLLLHHHH      1 HLLLHHHH
 2 HLHHLHHH      2 HLHHLHHH      2 HLHHLHHH      2 HLHHLHHH
 3 HLHHLHHH      3 HLHHLHHH      3 HLHHLHHH      3 HLHHLHHH
 4 HLHHLHHH      4 HLHHLHHH      4 HLHHLHHH      4 HLHHLHHH
 5 HLLLLHHH      5 HLLLHHLH      5 HLLLHLLH      5 HLLLHLLH
 6 HHHHLHHH      6 HHHHHLLH      6 LHHHLHLH      6 LHHHHHLH
 7 HHHHLHHH      7 HHHHHHLH      7 HHHHHHLH      7 HHHHHLLH
 8 HHHHLHHH      8 HHHHHHLH      8 HHHHHLHH      8 LHHHHHLH
 9 HHHHLLLL      9 HHHHHLLL      9 LHHHLLLH      9 HHHHHLLH
10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH
11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH
12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH

   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 HLLLHHHH      1 HLHHLHHH      1 HLLLLHHH      1 HLLLLHHH
 2 HLHHLHHH      2 HLLHLHHH      2 HLHHHHHH      2 HLHHHHHH
 3 HLHHLHHH      3 HLHLLHHH      3 HLLLLHHH      3 HLLLHHHH
 4 HLHHLHHH      4 HLHHLHHH      4 HHHHLHHH      4 HLHHHHHH
 5 HLLLHHLH      5 HLHHLHHL      5 HLLLLHHL      5 HLLLLLLL
 6 HHHHHLHH      6 HHHHLHLH      6 HHHHLHLH      6 HHHHLHHL
 7 HHHHLHLH      7 HHHHLLHH      7 HHHHHLHH      7 HHHHLLLL
 8 HHHLLLLL      8 HHHHLHLH      8 HHHHHLHH      8 HHHHLHHL
 9 HHHHHHLH      9 HHHHLHHL      9 HHHHHLHH      9 HHHHLLLL
10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH
11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH
12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH

   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 LLLLHHHH      1 HLLLLHHH      1 HLLLLHHH      1 HLLLLHHH
 2 HLHHLHHH      2 HLHHHHHH      2 HLHHHHHH      2 HLHHHHHH
 3 HLHHHHHH      3 HLLLLHHH      3 HLLLLHHH      3 HLLLHHHH
 4 HLHHLHHH      4 HLHHHHHH      4 HHHHLHHH      4 HLHHHHHH
 5 LLLLHHLH      5 HLLLLHHL      5 HLLLLLLL      5 HLLLLLLL
 6 LHHLHHLH      6 HHHLLHLL      6 HHHHLHHL      6 LHHHLHHH
 7 LHHLLHLH      7 HHHLHLHL      7 HHHHLLLL      7 LHHHLHHH
 8 LHHLHLLH      8 HHHLHHHL      8 HHHHLHHL      8 LHHHLHHH
 9 LHHLHHLH      9 HHHLHHHL      9 HHHHLLLL      9 HHHHHLLL
10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH
11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH
12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH

   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 HLLLLHHH      1 HLLLLHHH      1 HLLLLHHH      1 HLHHLHHH
 2 HLHHHHHH      2 HLHHHHHH      2 HLHHLHHH      2 HLHHLHHH
 3 HLLLHHHH      3 HLHLLHHH      3 HLLLLHHH      3 HLHHLHHH
 4 HLHHHHHH      4 HLHHLHHH      4 HLHLHHHH      4 HLHHLHHH
 5 HLHHLLLL      5 HLLLLLLL      5 HLHLLLLL      5 HLLLLLLL
 6 HHHHLHHH      6 HHHHLHHH      6 HHHHLHHH      6 HHHHLHHH
 7 HHHHLLLL      7 HHHHLLLL      7 HHHHLLLL      7 HHHHLLLL
 8 HHHHHHHL      8 HHHHHHHL      8 HHHHHHHL      8 HHHHHHHL
 9 HHHHLLLL      9 HHHHLLLL      9 HHHHLLLL      9 HHHHLLLL
10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH
11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH
12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH
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EXTENDED ROMAN CHARACTER SET, NULL-US (00-37B)
HEWLETT-PACKARD CO.
NULL-US (00-37B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGG

0- 3	S	BHHHHHHHHF	BHHLHHHLHF	BHHLHHLLHF	BHHLHLHLHF
4- 7		BHHLLHHLHF	BLHLLHHLHF	BLHHLHHHHF	BLHHLHHHHF
8- 11		BLHHLHHHHF	BLLLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
12- 15		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
16- 19		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHLLLLHF
20- 23		BHHHLHHHHF	BLHHLLLLHF	BLHHLHHHHF	BLLLLHHHHF
24- 27		BLHHLHHHHF	BLHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
28- 31		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
32- 35		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHLLLLHF
36- 39		BHHHLHHHHF	BLLHLLLLHF	BHHLLHHHLF	BHHLHHHHHF
40- 43		BHHLLHHHLF	BLLHLLHHHF	BHHHHHHHHF	BHHHHHHHHF
44- 47		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
48- 51		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHHLLLHF
52- 55		BHHHHHHLHF	BLLHLLLLHF	BHHLLHHHLF	BHHLHHHHHF
56- 59		BHHLLHHHLF	BLLHLLHHHF	BHHHHHHHHF	BHHHHHHHHF
60- 63		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
64- 67		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHHLLLHF
68- 71		BHHHHHHLHF	BLLLLLLLHF	BHHLHHHHLF	BHHLHHHHLF
72- 75		BHHLHHHHLF	BHHLHHHHLF	BHHHHHHHHF	BHHHHHHHHF
76- 79		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
80- 83		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHHLLLHF
84- 87		BHHHHHHLHF	BHLLLLLLHF	BLHHLHHHHF	BLHHLHHHHF
88- 91		BLLHLHHHHF	BLLLHHHHHF	BHHHHHHHHF	BHHHHHHHHF
92- 95		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
96- 99		BHHHHHHHHF	BHHHHHLHLF	BHHHHLLHHF	BHHHHLHLLF
100-103		BHHHLLLLHF	BLHHLHHLHF	BHLHLHHHHF	BHHLLHHHHF
104-107		BHLHLHHHHF	BLHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
108-111		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
112-115		BHHHHHHHHF	BHHHLLHHLF	BHHLHHLHLF	BHLHHHLHHF
116-119		BHLHHHLHHF	BHLHHHLHHF	BHLHHHHLLF	BLLLLLLLHF
120-123		BHHLHLHHHF	BHHHLLHHLF	BHHHHHHHHF	BHHHHHHHHF
124-127		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
128-131		BHHHHHHHHF	BHHHLLLLHF	BHHHLHHLHF	BHHHLLLLHF
132-135		BHHHLHHLHF	BLLLLLLLHF	BHHHLHHHHF	BLLLLHHHHF
136-139		BLHHHHHHHF	BLLLLHHHHF	BHHHHHHHHF	BHHHHHHHHF
140-143		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
144-147		BHHHHHHHHF	BHHHLHHLHF	BHHHLHHLHF	BHHHLLLLHF
148-151		BHHHLHHLHF	BLLLLHHLHF	BHHLHHHHLF	BHHLHHHHLF
152-155		BHHLHHHHLF	BHHLHHHHLF	BHHHHHHHHF	BHHHHHHHHF
156-159		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
160-163		BHHHHHHHHF	BHHHHHHLHF	BHHHHHHLHF	BHHHHHHLHF
164-167		BHHHHHHLHF	BLLLHLLLHF	BHHLHHHHHF	BLLLHHHHHF
168-171		BHHLHHHHHF	BHHLHHHHHF	BHHHHHHHHF	BHHHHHHHHF
172-175		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
176-179		BHHHHHHHHF	BHHHLHHLHF	BHHHLHHLHF	BHHHHLHLLF
180-183		BHHHHLLHHF	BHLLLLLLHF	BHHLHHHHHF	BHHLHHHHHF
184-187		BHHLHHHHHF	BHHLHHHHHF	BHHHHHHHHF	BHHHHHHHHF
188-191		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
192-195		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHHLLLHF
196-199		BHHHHHHLHF	BLLLLHHLHF	BHHHLHHHHF	BHLLLHHHHF
200-203		BHHHLHHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
204-207		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
208-211		BHHHHHHHHF	BHHHHLLLLF	BHHHLHHLHF	BHHHHHHLHF
212-215		BHHHLHHLHF	BHLLLLLLLF	BLHHLHHHHF	BLLLLHHHHF
216-219		BHLHLHHHHF	BLHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
220-223		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
224-227		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHLLLLHF
228-231		BHHHLHHHHF	BHLLLLLLHF	BLHHLHHHHF	BLHHLHHHHF
232-235		BLHHLHHHHF	BHLLHHHHHF	BHHHHHHHHF	BHHHHHHHHF
236-239		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
240-243		BHHHHHHHHF	BHHHLLLLHF	BHHHHHHLHF	BHHHLLLLHF
244-247		BHHHLHHHHF	BHLHLLLLHF	BHLHHHHHHF	BHLHHHHHHF
248-251		BHLHHHHHHF	BHLHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
252-255		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF

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256-259  BHHHHHHHHF BHHHHLLLHF BHHHLHHLHF BHHHLHHLHF
260-263  BHHHLHHLHF BHHHLLLLHF BHHHLHHHHF BHHHLHHHHF
264-267  BHHHLHHHHF BLLLLHHHHF BHHHHHHHHF BHHHHHHHHF
268-271  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
272-275  BHHHHHHHHF BHHHHLLLHF BHHHLHHLHF BHHHLHHLHF
276-279  BHHHLHHLHF BHLHHLLLHF BHLLHHHHHF BHLHHHHHHF
280-283  BHLHHHHHHF BLLLHHHHHF BHHHHHHHHF BHHHHHHHHF
284-287  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
288-291  BHHHHHHHHF BHHHHLLLHF BHHHLHHLHF BHHHLHHLHF
292-295  BHHHLHHLHF BHLLHLLLHF BHLHLHHHLF BHLHHHHHHF
296-299  BHHLHHHHHF BHLLLHHHLF BHHHHHHHHF BHHHHHHHHF
300-303  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
304-307  BHHHHHHHHF BHHHHLLLHF BHHHLHHLHF BHHHLHHLHF
308-311  BHHHLHHLHF BHLLHLLLHF BHLHHHHHLF BHLLHHHHHF
312-315  BHLHHHHHLF BHLLHHHHHF BHHHHHHHHF BHHHHHHHHF
316-319  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
320-323  BHHHHHHHHF BHHHHLLLHF BHHHLHHLHF BHHHLHHLHF
324-327  BHHHLHHLHF BHLHHLLLHF BHHLHHHHHF BHLHLHHHHF
328-331  BLLLLLHHHF BHLHHHHHHF BHHHHHHHHF BHHHHHHHHF
332-335  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
336-339  BHHHHHHHHF BHHHLHHLHF BHHHLHLLHF BHHHLLHLHF
340-343  BHHHLHHLHF BLHHLHHLHF BHLHLHHHHF BHHLLHHHHF
344-347  BHLHLHHHHF BLHHLHHHHF BHHHHHHHHF BHHHHHHHHF
348-351  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
352-355  BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHLLLLHF
356-359  BHHHLHHHHF BLHHLLLLHF BHLHLHHHHF BHHLHHHHHF
360-363  BHHLHHHHHF BHHLHHHHHF BHHHHHHHHF BHHHHHHHHF
364-367  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
368-371  BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHHLLLHF
372-375  BHHHHHHLHF BLLLLLLLHF BLHHLHHHHF BLLLLHHHHF
376-379  BLHHLHHHHF BLLLLHHHHF BHHHHHHHHF BHHHHHHHHF
380-383  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
384-387  BHHHHHHHHF BHHHHLLLLF BHHHLHHLHF BHHHHHHLHF
388-391  BHHHLHHLHF BHLHHLLLLF BHLHHLHHLF BHLHLLHHLF
392-395  BHLLHLHHLF BHLHHLHHLF BHHHHHHHHF BHHHHHHHHF
396-399  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
400-403  BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHHLLLHF
404-407  BHHHHHHLHF BLHHLLLLHF BLLHLLHHHF BLHLHLHHHF
408-411  BLHHHLHHHF BLHHHLHHHF BHHHHHHHHF BHHHHHHHHF
412-415  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
416-419  BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHLLLLHF
420-423  BHHHLHHHHF BLLLLLLLHF BLHHLHHHHF BLLLLHHHHF
424-427  BLHHLHHHHF BLLLLHHHHF BHHHHHHHHF BHHHHHHHHF
428-431  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
432-435  BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHHLLLHF
436-439  BHHHHHHLHF BLLLLLLLHF BHHHLHHHLF BHHHLHHHLF
440-443  BHHHLHHHLF BLLLHHHHHF BHHHHHHHHF BHHHHHHHHF
444-447  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
448-451  BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHHLLLHF
452-455  BHHHHHHLHF BLLLLHHLHF BHHHLHHHHF BLLLLHHHHF
456-459  BLHHHHHHHF BLLLLHHHHF BHHHHHHHHF BHHHHHHHHF
460-463  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
464-467  BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHLLHLHF
468-471  BHHHLHHLHF BLLLLLLLHF BHHHLHHHHF BLLLLHHHHF
472-475  BLHHHHHHHF BLLLLHHHHF BHHHHHHHHF BHHHHHHHHF
476-479  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
480-483  BHHHHHHHHF BHHHLLLLHF BHHHLHHLHF BHHHLLLLHF
484-487  BHHHHLHLHF BLLLLLHLHF BHHHLHHHHF BLLLLHHHHF
488-491  BLHHHHHHHF BLLLLHHHHF BHHHHHHHHF BHHHHHHHHF
492-495  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
496-499  BHHHHHHHHF BHHHLHHLHF BHHHLHHLHF BHHHLHHLHF
500-503  BHHHLHHLHF BLLLLLLLHF BHHHLHHHHF BLLLLHHHHF
504-507  BLHHHHHHHF BLLLLHHHHF BHHHHHHHHF BHHHHHHHHF
508-511  BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF E
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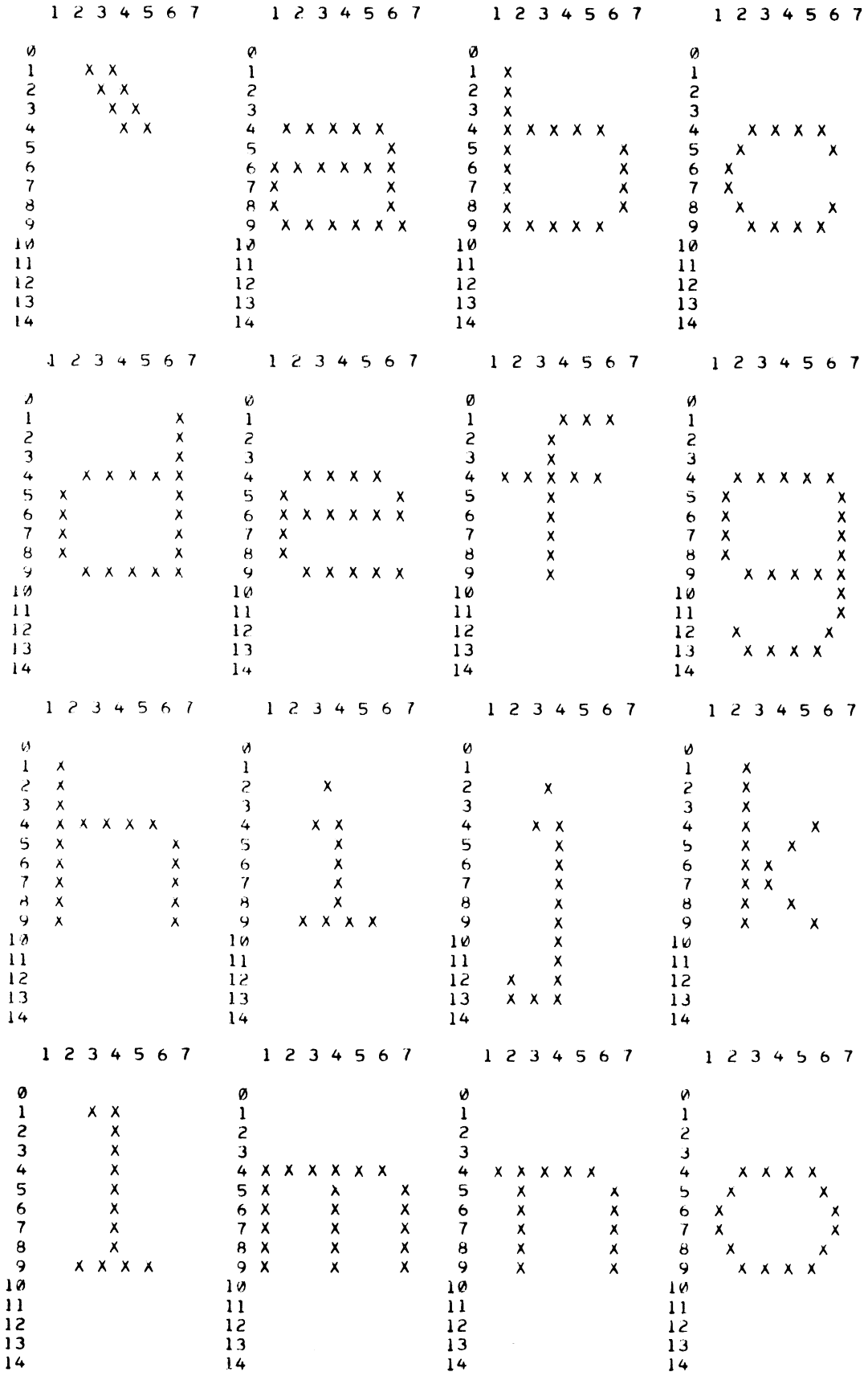
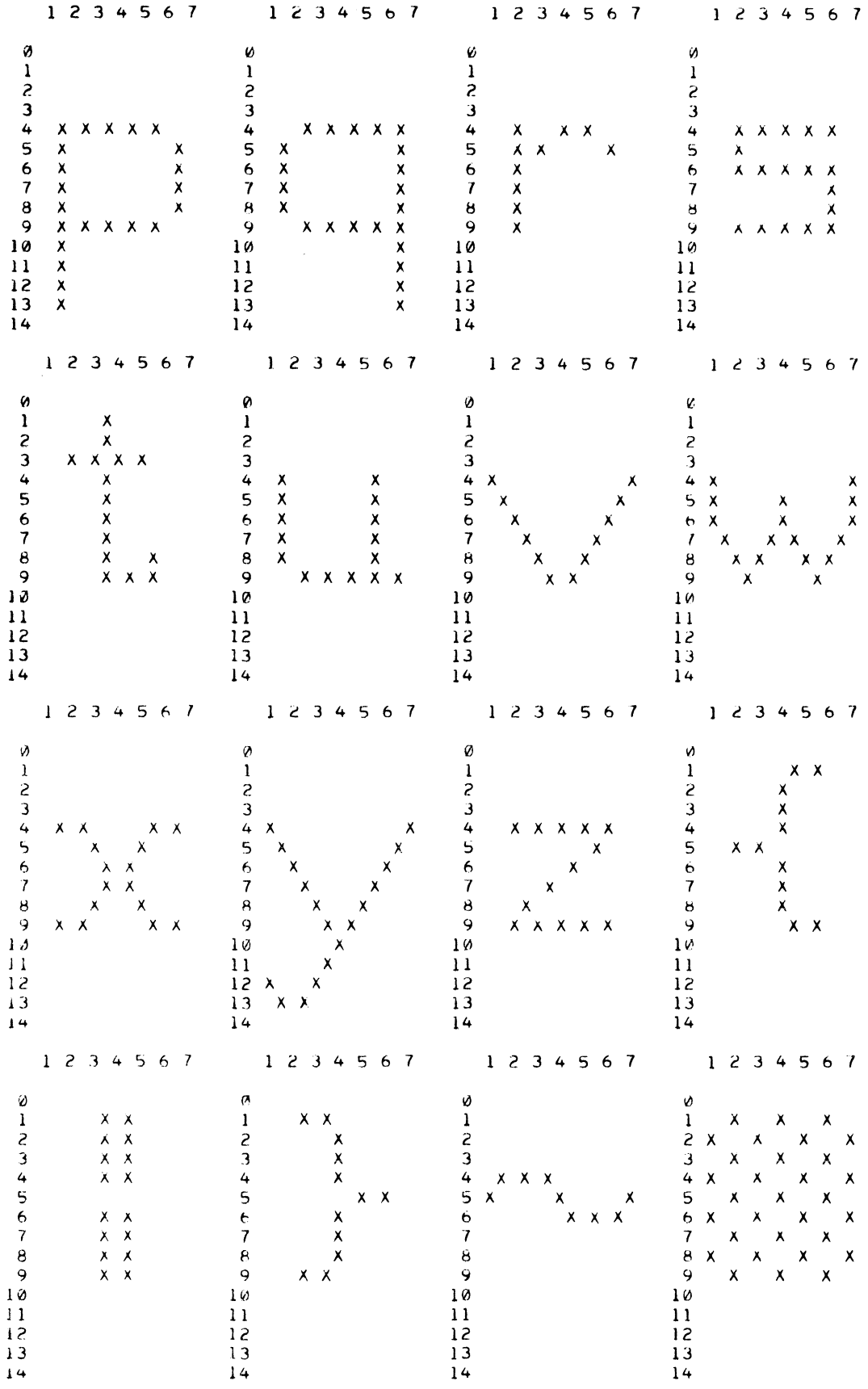
EXTENDED ROMAN CHARACTER SET (GRAVE ACCENT)-DEL (140-177B)





EXTENDED ROMAN CHARACTER SET (GRAVE ACCENT)-DEL (140-177B)

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	LHLLHHHH	HHHHHHHH	LLHHHHHH	HHHHHHHH
2	HHHLLHHH	HHHHHHHH	LLHHHHHH	HHHHHHHH
3	LHHLLHHH	HHHHHHHH	LLHHHHHH	HHHHHHHH
4	HHHHLLHH	LLLLLLHH	LLLLLLHH	LHLLLLHH
5	HHHHHHHH	HHHHHHLH	LLHHHHLH	HHLHHHLH
6	HHHHHHHH	HLLLLLLH	LLHHHHLH	LLHHHHHH
7	HHHHHHHH	HLHHHHLH	LLHHHHLH	LLHHHHHH
8	HHHHHHHH	HLHHHHLH	LLHHHHLH	HHLHHHLH
9	HHHHHHHH	LLLLLLLH	LLLLLLHH	LHLLLLHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	LHHHHHLH	HHHHHHHH	HHHHLLLH	HHHHHHHH
2	LHHHHHLH	HHHHHHHH	LHHLHHHH	HHHHHHHH
3	LHHHHHLH	HHHHHHHH	LHHLHHHH	HHHHHHHH
4	LHLLLLLH	LHLLLLHH	LLLLLLHH	HHLLLLLH
5	LLHHHHLH	LLHHHHLH	LHHLHHHH	LLHHHHLH
6	LLHHHHLH	LLLLLLLH	LHHLHHHH	LLHHHHLH
7	LLHHHHLH	LLHHHHHH	LHHLHHHH	LLHHHHLH
8	LLHHHHLH	LLHHHHHH	LHHLHHHH	LLHHHHLH
9	LHLLLLLH	LHLLLLLH	LHHLHHHH	LHLLLLLH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	LHHHHHLH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	LHHHHHLH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHLHHHLH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	LHLLLLHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	LLHHHHHH	HHHHHHHH	HHHHHHHH	LHLHHHHH
2	LLHHHHHH	LHHLHHHH	LHHLHHHH	LHLHHHHH
3	LLHHHHHH	HHHHHHHH	HHHHHHHH	LHLHHHHH
4	LLLLLLHH	HHHLLHHH	HHHLLHHH	LHLHHLHH
5	LLHHHHLH	HHHHLHHH	HHHHLHHH	LHLHLHHH
6	LLHHHHLH	HHHHLHHH	HHHHLHHH	LHLLHHHH
7	LLHHHHLH	HHHHLHHH	HHHHLHHH	LHLLHHHH
8	LLHHHHLH	HHHHLHHH	HHHHLHHH	LHLHLHHH
9	LLHHHHLH	LHLLLLHH	HHHHLHHH	LHLHHLHH
10	HHHHHHHH	HHHHHHHH	HHHHLHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHLHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHLHLHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHLLLHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HHHLLHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
2	HHHHLHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
3	HHHHLHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
4	HHHHLHHH	HLLLLLLH	LLLLLLHH	LHLLLLHH
5	HHHHLHHH	HLHHLHHL	LHLHHHLH	HHLHHHLH
6	HHHHLHHH	HLHHLHHL	LHLHHHLH	LLHHHHLH
7	HHHHLHHH	HLHHLHHL	LHLHHHLH	LLHHHHLH
8	HHHHLHHH	HLHHLHHL	LHLHHHLH	HHLHHHLH
9	LHLLLLHH	HLHHLHHL	LHLHHHLH	LHLLLLHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

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   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 HHHHHHHH      1 HHHHHHHH      1 HHHHHHHH      1 HHHHHHHH
 2 HHHHHHHH      2 HHHHHHHH      2 HHHHHHHH      2 HHHHHHHH
 3 HHHHHHHH      3 HHHHHHHH      3 HHHHHHHH      3 HHHHHHHH
 4 LLLLLLHH      4 LHLLLLLH      4 HHLHLLHH      4 HHLLLLLH
 5 LLHHHHLH      5 LLHHHHLH      5 HHLLHHLH      5 HHLHHHHH
 6 LLHHHHLH      6 LLHHHHLH      6 HHLHHHHH      6 HHLLLLLH
 7 LLHHHHLH      7 LLHHHHLH      7 HHLHHHHH      7 HHHHHHLH
 8 LLHHHHLH      8 LLHHHHLH      8 HHLHHHHH      8 HHHHHHLH
 9 LLLLLLHH      9 LHLLLLLH      9 HHLHHHHH      9 HHLLLLLH
10 LLHHHHHH     10 LHHHHHLH     10 HHHHHHHH     10 HHHHHHHH
11 LLHHHHHH     11 LHHHHHLH     11 HHHHHHHH     11 HHHHHHHH
12 LLHHHHHH     12 LHHHHHLH     12 HHHHHHHH     12 HHHHHHHH
13 LLHHHHHH     13 LHHHHHLH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH

   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 LHHLHHHH      1 HHHHHHHH      1 HHHHHHHH      1 HHHHHHHH
 2 LHHLHHHH      2 HHHHHHHH      2 HHHHHHHH      2 HHHHHHHH
 3 HHLLLLHH      3 HHHHHHHH      3 HHHHHHHH      3 HHHHHHHH
 4 LHHLHHHH      4 LLHHHLHH      4 HLHHHHHL      4 HLHHHHHL
 5 LHHLHHHH      5 LLHHHLHH      5 LLHHHHLH      5 HLHHLHHL
 6 LHHLHHHH      6 LLHHHLHH      6 HHLHHHLH      6 HLHHLHHL
 7 LHHLHHHH      7 LLHHHLHH      7 LHLHHLHH      7 LLHLLHLH
 8 LHHLHLHH      8 LLHHHLHH      8 HHHLHLHH      8 HHLLHLLH
 9 LHHLLLHH      9 LHLLLLLH      9 LHHLLHHH      9 LHLHHLHH
10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH
11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH
12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH

   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 HHHHHHHH      1 HHHHHHHH      1 HHHHHHHH      1 LHHHLLHH
 2 HHHHHHHH      2 HHHHHHHH      2 HHHHHHHH      2 HHHHLHHH
 3 HHHHHHHH      3 HHHHHHHH      3 HHHHHHHH      3 HHHHLHHH
 4 LLLHHLLH      4 HLHHHHHL      4 HHLLLLLH      4 HHHHLHHH
 5 HHHLHLHH      5 LLHHHHLH      5 LHHHHLHH      5 HHLLHHHH
 6 LHHLLHHH      6 HHLHHHLH      6 LHHHLHHH      6 HHHHLHHH
 7 LHHLLHHH      7 LHLHHLHH      7 LHHLHHHH      7 HHHHLHHH
 8 HHHLHLHH      8 HHHLHLHH      8 LHLHHHHH      8 HHHHLHHH
 9 LLLHHLLH      9 LHHLLHHH      9 HHLLLLLH      9 LHHHLLHH
10 HHHHHHHH     10 HHHHLHHH     10 HHHHHHHH     10 HHHHHHHH
11 HHHHHHHH     11 LHHLHHHH     11 HHHHHHHH     11 HHHHHHHH
12 HHHHHHHH     12 HLHLHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 LLLHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH

   01234567        01234567        01234567        01234567

 0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH      0 HHHHHHHH
 1 LHHLLHHH      1 LHLLHHHH      1 HHHHHHHH      1 HHLHLHLH
 2 LHHLLHHH      2 HHHHLHHH      2 HHHHHHHH      2 HLHLHLHL
 3 LHHLLHHH      3 HHHHLHHH      3 HHHHHHHH      3 HHLHLHLH
 4 LHHLLHHH      4 HHHHLHHH      4 LLLLHHHH      4 HLHLHLHL
 5 HHHHHHHH      5 HHHHHLLH      5 HLHHLHHL      5 HHLHLHLH
 6 LHHLLHHH      6 HHHHLHHH      6 LHHHLLLH      6 HLHLHLHL
 7 LHHLLHHH      7 HHHHLHHH      7 HHHHHHHH      7 HHLHLHLH
 8 LHHLLHHH      8 HHHHLHHH      8 HHHHHHHH      8 HLHLHLHL
 9 LHHLLHHH      9 LHLLHHHH      9 HHHHHHHH      9 HHLHLHLH
10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH
11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH
12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH
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EXTENDED ROMAN CHARACTER SET
HEWLETT-PACKARD CO.
(GRAVE ACCENT)-DEL (140-177B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGGG

0- 3	S	BHHHHHHHHF	BHHHHLLHLF	BHHHLLHHHF	BHHHLLHHLF
4- 7		BHHLLHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
8- 11		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
12- 15		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
16- 19		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
20- 23		BHHLLLLLLF	BHLHHHHHHF	BHLLLLLLHF	BHLHHHHLHF
24- 27		BHLHHHHLHF	BHLLLLLLLF	BHHHHHHHHF	BHHHHHHHHF
28- 31		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
32- 35		BHHHHHHHHF	BHHHHHHLLF	BHHHHHHLLF	BHHHHHHLLF
36- 39		BHHLLLLLLF	BHLHHHHLLF	BHLHHHHLLF	BHLHHHHLLF
40- 43		BHLHHHHLLF	BHHLLLLLLF	BHHHHHHHHF	BHHHHHHHHF
44- 47		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
48- 51		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
52- 55		BHHLLLLHLF	BHLHHHLHHF	BHHHHHHLLF	BHHHHHHLLF
56- 59		BHLHHHLHHF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
60- 63		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
64- 67		BHHHHHHHHF	BHLHHHHHLF	BHLHHHHHLF	BHLHHHHHLF
68- 71		BHLLLLLHLF	BHLHHHHLLF	BHLHHHHLLF	BHLHHHHLLF
72- 75		BHLHHHHLLF	BHLLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
76- 79		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
80- 83		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
84- 87		BHHLLLLHLF	BHLHHHHLLF	BHLLLLLLLF	BHHHHHHLLF
88- 91		BHHHHHHLLF	BHLLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
92- 95		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
96- 99		BHHHHHHHHF	BHLLLHHHHF	BHHHHLHHLF	BHHHHLHHLF
100-103		BHHLLLLLLF	BHHHHLHHLF	BHHHHLHHLF	BHHHHLHHLF
104-107		BHHHHLHHLF	BHHHHLHHLF	BHHHHHHHHF	BHHHHHHHHF
108-111		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
112-115		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
116-119		BHLLLLLHHF	BHLHHHHLLF	BHLHHHHLLF	BHLHHHHLLF
120-123		BHLHHHHLLF	BHLLLLLHLF	BHLHHHHHLF	BHLHHHHHLF
124-127		BHLHHHLHHF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
128-131		BHHHHHHHHF	BHHHHHHLLF	BHHHHHHLLF	BHHHHHHLLF
132-135		BHHLLLLLLF	BHLHHHHLLF	BHLHHHHLLF	BHLHHHHLLF
136-139		BHLHHHHLLF	BHLHHHHLLF	BHHHHHHHHF	BHHHHHHHHF
140-143		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
144-147		BHHHHHHHHF	BHHHHHHHHF	BHHHHLHHLF	BHHHHHHHHF
148-151		BHHHLLHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
152-155		BHHHLHHHHF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
156-159		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
160-163		BHHHHHHHHF	BHHHHHHHHF	BHHHHLHHLF	BHHHHHHHHF
164-167		BHHHLLHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
168-171		BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
172-175		BHHHLHLHHF	BHHHLLLHHF	BHHHHHHHHF	BHHHHHHHHF
176-179		BHHHHHHHHF	BHHHHHLHLF	BHHHHHLHLF	BHHHHHLHLF
180-183		BHHLHHLHLF	BHHHLHLHLF	BHHHHLLHLF	BHHHHLLHLF
184-187		BHHHLHLHLF	BHHLHHLHLF	BHHHHHHHHF	BHHHHHHHHF
188-191		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
192-195		BHHHHHHHHF	BHHHLLHHHF	BHHHLHHHHF	BHHHLHHHHF
196-199		BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
200-203		BHHHLHHHHF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
204-207		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
208-211		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
212-215		BHLLLLLLHF	BLHHLHHLHF	BLHHLHHLHF	BLHHLHHLHF
216-219		BLHHLHHLHF	BLHHLHHLHF	BHHHHHHHHF	BHHHHHHHHF
220-223		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
224-227		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
228-231		BHHLLLLLLF	BHLHHHLHLF	BHLHHHLHLF	BHLHHHLHLF
232-235		BHLHHHLHLF	BHLHHHLHLF	BHHHHHHHHF	BHHHHHHHHF
236-239		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
240-243		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
244-247		BHHLLLLHLF	BHLHHHLHHF	BHLHHHHLLF	BHLHHHHLLF
248-251		BHLHHHLHHF	BHHLLLLHLF	BHHHHHHHHF	BHHHHHHHHF
252-255		BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF

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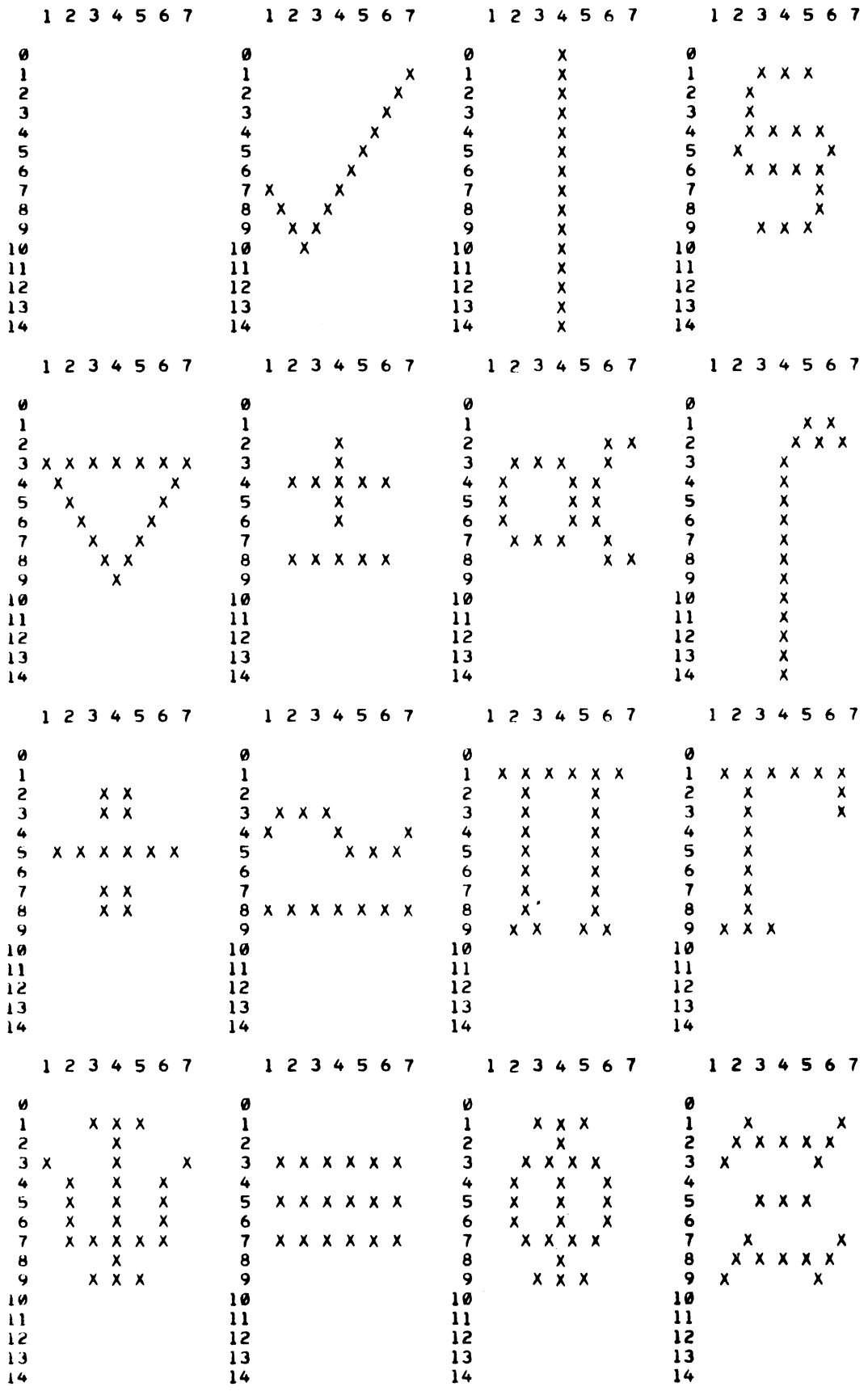
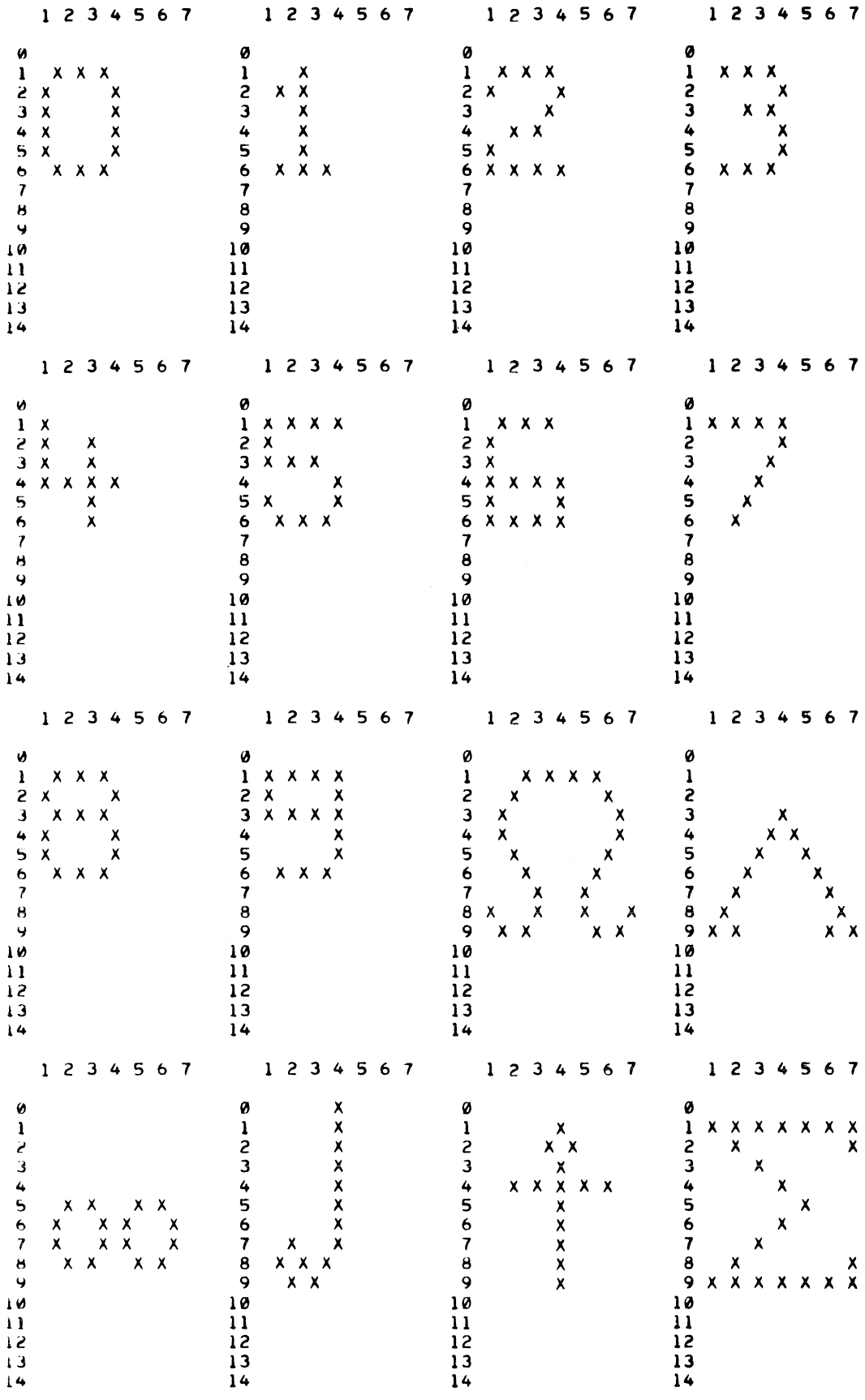
256-259   BHHHHHHHHHF BHHHHHHHHHF BHHHHHHHHHF BHHHHHHHHHF
260-263   BHHLLLLLLLF BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF
264-267   BHLHHHHLLF BHHLLLLLLF BHHHHHHLLF BHHHHHHLLF
268-271   BHHHHHHLLF BHHHHHHLLF BHHHHHHHHF BHHHHHHHHF
272-275   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
276-279   BHLLLLLHLF BHLHHHHLLF BHLHHHHLLF BHLHHHHLLF
280-283   BHLHHHHLLF BHLLLLLHLF BHLHHHHHLF BHLHHHHHLF
284-287   BHLHHHHHLF BHLHHHHHLF BHHHHHHHHF BHHHHHHHHF
288-291   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
292-295   BHHLLHLHHF BHLHHLLHHF BHHHHHLHHF BHHHHHLHHF
296-299   BHHHHHLHHF BHHHHHLHHF BHHHHHHHHF BHHHHHHHHF
300-303   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
304-307   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
308-311   BHLLLLLHHF BHHHHHLHHF BHLLLLLHHF BHLHHHHHHF
312-315   BHLHHHHHHF BHLLLLLHHF BHHHHHHHHF BHHHHHHHHF
316-319   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
320-323   BHHHHHHHHF BHHHHLHHLF BHHHHLHHLF BHHLLLLHHF
324-327   BHHHHLHHLF BHHHHLHHLF BHHHHLHHLF BHHHHLHHLF
328-331   BHHLHLHHLF BHHLLLHHLF BHHHHHHHHF BHHHHHHHHF
332-335   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
336-339   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
340-343   BHHLHHHLLF BHHLHHHLLF BHHLHHHLLF BHHLHHHLLF
344-347   BHHLHHHLLF BHLLLLLHLF BHHHHHHHHF BHHHHHHHHF
348-351   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
352-355   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
356-359   BLHHHHHLHF BHLHHHHLLF BHLHHHLHHF BHHLHHLHLF
360-363   BHHLHLHHHF BHHHLLHHLF BHHHHHHHHF BHHHHHHHHF
364-367   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
368-371   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
372-375   BLHHHHHLHF BLHHLHHLHF BLHHLHHLHF BHLHLLHLLF
376-379   BHLLHLLHHF BHHLHHLHLF BHHHHHHHHF BHHHHHHHHF
380-383   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
384-387   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
388-391   BHLLHHLLLF BHHLHLHHHF BHHHLLHHLF BHHHLLHHLF
392-395   BHHLHLHHHF BHLLHHLLLF BHHHHHHHHF BHHHHHHHHF
396-399   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
400-403   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
404-407   BLHHHHHLHF BHLHHHHLLF BHLHHHLHHF BHHLHHLHLF
408-411   BHHLHLHHHF BHHHLLHHLF BHHHLHHHHF BHHHHLHHLF
412-415   BHHHHLHLHF BHHHHHLLLF BHHHHHHHHF BHHHHHHHHF
416-419   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
420-423   BHLLLLLHHF BHHLHHHHLF BHHHLHHHLF BHHHHLHHLF
424-427   BHHHHHLHLF BHLLLLLHHF BHHHHHHHHF BHHHHHHHHF
428-431   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
432-435   BHHHHHHHHF BHHLLHHHLF BHHHLHHHHF BHHHLHHHHF
436-439   BHHHLHHHHF BHHHHLLHHF BHHHLHHHHF BHHHLHHHHF
440-443   BHHHLHHHHF BHHLLHHHLF BHHHHHHHHF BHHHHHHHHF
444-447   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
448-451   BHHHHHHHHF BHHHLLHHLF BHHHLLHHLF BHHHLLHHLF
452-455   BHHHLLHHLF BHHHHHHHHF BHHHLLHHLF BHHHLLHHLF
456-459   BHHHLLHHLF BHHHLLHHLF BHHHHHHHHF BHHHHHHHHF
460-463   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
464-467   BHHHHHHHHF BHHHHLLHLF BHHHLHHHHF BHHHLHHHHF
468-471   BHHHLHHHHF BHLLHHHHHF BHHHLHHHHF BHHHLHHHHF
472-475   BHHHLHHHHF BHHHHLLHLF BHHHHHHHHF BHHHHHHHHF
476-479   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
480-483   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
484-487   BHHHHLLLLF BLHHLHHLHF BHLLLHHHLF BHHHHHHHHF
488-491   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
492-495   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
496-499   BHHHHHHHHF BHLHLHLHHF BLHLHLHLHF BHLHLHLHHF
500-503   BLHLHLHLHF BHLHLHLHHF BLHLHLHLHF BHLHLHLHHF
504-507   BLHLHLHLHF BHLHLHLHHF BHHHHHHHHF BHHHHHHHHF
508-511   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF E
```

MATH SYMBOL SET (SPACE)=? (40-77B)



APPENDIX F MATH Symbol Set PROM Listing



MATH SYMBOL SET (SPACE)-? (40-77B)

	01234567	01234567	01234567	01234567
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1	HHHHHHHH	HHHHHHHL	HHHHLHHH	HHHLLLHH
2	HHHHHHHH	LHHHHHLH	HHHHLHHH	LHLHHHHH
3	HHHHHHHH	HHHHHHLH	HHHHLHHH	LHLHHHHH
4	HHHHHHHH	LHHHHLHH	HHHHLHHH	LHLLLLHH
5	HHHHHHHH	HHHHHLHH	HHHHLHHH	HHLHHHLH
6	HHHHHHHH	LHHHLHHH	HHHHLHHH	LHLLLLHH
7	HHHHHHHH	HLHHLHHH	HHHHLHHH	LHHHHLHH
8	HHHHHHHH	LLHLHHHH	HHHHLHHH	LHHHHLHH
9	HHHHHHHH	HHLLHHHH	HHHHLHHH	HHHLLLHH
10	HHHHHHHH	LHLHHHHH	HHHHLHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHLHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHLHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHLHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHLHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHLLH
2	HHHHHHHH	HHHHLHHH	HHHHHHLL	LHHHLLLH
3	HLLLLLLL	HHHHLHHH	HHLLLHLH	HHHHLHHH
4	LLHHHHLH	HHLLLLLH	LLHHLLHH	HHHHLHHH
5	HHLHHHLH	HHHHLHHH	LLHHLLHH	HHHHLHHH
6	LHLHHLHH	HHHHLHHH	LLHHLLHH	HHHHLHHH
7	HHHLHLHH	HHHHHHHH	HHLLLHLH	HHHHLHHH
8	LHHLLHHH	HHLLLLLH	HHHHHHLL	HHHHLHHH
9	HHHHLHHH	HHHHHHHH	HHHHHHHH	HHHHLHHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHLHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHLHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHLHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHLHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHLHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HHHHHHHH	HHHHHHHH	LLLLLLLH	LLLLLLLH
2	LHHLLHHH	HHHHHHHH	LHLHHLHH	LHLHHHLH
3	LHHLLHHH	LLLLHHHH	LHLHHLHH	LHLHHHLH
4	HHHHHHHH	HLHHLHHL	LHLHHLHH	LHLHHHHH
5	LLLLLLLH	LHHHLLLH	LHLHHLHH	LHLHHHHH
6	HHHHHHHH	HHHHHHHH	LHLHHLHH	LHLHHHHH
7	LHHLLHHH	HHHHHHHH	LHLHHLHH	LHLHHHHH
8	LHHLLHHH	HLLLLLLL	LHLHHLHH	LHLHHHHH
9	HHHHHHHH	HHHHHHHH	HHLLHLLH	LLLLHHHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	01234567	01234567	01234567	01234567
0	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
1	HHHLLLHH	HHHHHHHH	HHHLLLHH	LHLHHHLH
2	HHHHLHHH	HHHHHHHH	HHHHLHHH	HHLLLLLH
3	HLHHLHHL	LLLLLLLH	LHLLLLHH	LLHHHLHH
4	HHLHLHLH	HHHHHHHH	HHLHLHLH	HHHHHHHH
5	HHLHLHLH	LLLLLLLH	HHLHLHLH	HHHLLLHH
6	HHLHLHLH	HHHHHHHH	HHLHLHLH	HHHHHHHH
7	HHLLLLLH	LLLLLLLH	LHLLLLHH	LHLHHHLH
8	HHHHLHHH	HHHHHHHH	HHHHLHHH	HHLLLLLH
9	HHHLLLHH	HHHHHHHH	HHHLLLHH	LLHHHLHH
10	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
11	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
12	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
13	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
14	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH
15	HHHHHHHH	HHHHHHHH	HHHHHHHH	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
1	LLLLHHHH
2	HLHHLHHH
3	HLHHLHHH
4	HLHHLHHH
5	HLHHLHHH
6	LLLLHHHH
7	HHHHHHHH
8	HHHHHHHH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
1	LHLHHHHH
2	LLLHHHHH
3	LHLHHHHH
4	LHLHHHHH
5	LHLHHHHH
6	LLLLHHHH
7	HHHHHHHH
8	HHHHHHHH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
1	LLLLHHHH
2	HLHHLHHH
3	LHHLHHHH
4	HHLLHHHH
5	HLHHHHHH
6	HLLLLHHH
7	HHHHHHHH
8	HHHHHHHH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
1	LLLLHHHH
2	HHHHLHHH
3	LHLLHHHH
4	HHHHLHHH
5	HHHHLHHH
6	LLLLHHHH
7	HHHHHHHH
8	HHHHHHHH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
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2	HLHLHHHH
3	HLHLHHHH
4	HLLLLHHH
5	HHHLHHHH
6	HHHLHHHH
7	HHHHHHHH
8	HHHHHHHH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
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5	HLHHLHHH
6	LLLLHHHH
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8	HHHHHHHH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
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14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
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8	HHHHHHHH
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1Ø	HHHHHHHH
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14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
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4	HHHLHHHH
5	LHLHHHHH
6	HHLHHHHH
7	HHHHHHHH
8	HHHHHHHH
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1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
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4	HLHHLHHH
5	HLHHLHHH
6	LLLLHHHH
7	HHHHHHHH
8	HHHHHHHH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
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14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
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4	HHHHLHHH
5	HHHHLHHH
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7	HHHHHHHH
8	HHHHHHHH
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1Ø	HHHHHHHH
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13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
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6	LHLHHLHH
7	HHHLHLHH
8	HLHLHLHL
9	LLLHHLLH
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12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
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2	HHHHHHHH
3	HHHHLHHH
4	LHHLLHHH
5	HHHLHLHH
6	LHLHHLHH
7	HHLHHHLH
8	LLHHHHLH
9	HLLHHHLL
1Ø	HHHHHHHH
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12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
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2	HHHHHHHH
3	HHHHHHHH
4	HHHHHHHH
5	HHLLHLLH
6	LLHLLHLH
7	LLHLLHLH
8	HHLLHLLH
9	HHHHHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHLHHH
1	HHHHLHHH
2	HHHHLHHH
3	HHHHLHHH
4	HHHHLHHH
5	HHHHLHHH
6	HHHHLHHH
7	HHLHLHHH
8	LLLLHHHH
9	HHLLHHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
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1	HHHHLHHH
2	LHHLLHHH
3	HHHHLHHH
4	HHLLLLLH
5	HHHHLHHH
6	HHHHLHHH
7	HHHHLHHH
8	HHHHLHHH
9	HHHHLHHH
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	Ø1234567
Ø	HHHHHHHH
1	HLLLLLLL
2	HHLHHHHL
3	HHHLHHHH
4	HHHHLHHH
5	HHHHHLHH
6	HHHHLHHH
7	HHHLHHHH
8	HHLHHHHL
9	HLLLLLLL
1Ø	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

```
MATH SYMBOL SET
HEWLETT-PACKARD CO.
(SPACE)=?  (40-77B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGG
  0-  3  S BHHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
  4-  7    BHHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
  8- 11    BHHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 12- 15    BHHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 16- 19    BHHHHHHHHHF BLHHHHHHHF BHLHHHHHLF BHLHHHHHHF
 20- 23    BHHLHHHHLF BHHLHHHHHF BHHHLHHHLF BHHHLHHLHF
 24- 27    BHHHHLHLLF BHHHHLLHHF BHHHHHLHLF BHHHHHHHHF
 28- 31    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 32- 35    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
 36- 39    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
 40- 43    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
 44- 47    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
 48- 51    BHHHHHHHHF BHHLLLHHHF BHHHHHLHLF BHHHHHLHLF
 52- 55    BHHLLLLHLF BHLHHHLHHF BHHLLLLHLF BHHLHHHHLF
 56- 59    BHHLHHHHLF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
 60- 63    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 64- 67    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLHF
 68- 71    BHLHHHHLLF BHLHHHLHHF BHHLHHLHLF BHHLHLHHHF
 72- 75    BHHHLLHHLF BHHHLHHHHF BHHHHHHHHF BHHHHHHHHF
 76- 79    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 80- 83    BHHHHHHHHF BHHHHHHHHF BHHHLHHHHF BHHHLHHHHF
 84- 87    BHLLLLLHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
 88- 91    BHLLLLLHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 92- 95    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 96- 99    BHHHHHHHHF BHHHHHHHHF BLLHHHHHHF BHLHLLLHHF
100-103    BHHLLHHLLF BHHLLHHLLF BHHLLHHLLF BHLHLLLHHF
104-107    BLLHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
108-111    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
112-115    BHHHHHHHHF BHLLHHHHHF BHLLLHHHLF BHHHLHHHHF
116-119    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
120-123    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
124-127    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
128-131    BHHHHHHHHF BHHHHHHHHF BHHHLLHHLF BHHHLLHHLF
132-135    BHHHHHHHHF BHLLLLLLLF BHHHHHHHHF BHHHLLHHLF
136-139    BHHHLLHHLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
140-143    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
144-147    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHLLLLF
148-151    BLHHLHHLHF BHLLLHHHLF BHHHHHHHHF BHHHHHHHHF
152-155    BLLLLLLLHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
156-159    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
160-163    BHHHHHHHHF BHLLLLLLLF BHHLHHLHLF BHHLHHLHLF
164-167    BHHLHHLHLF BHHLHHLHLF BHHLHHLHLF BHHLHHLHLF
168-171    BHHLHHLHLF BHLLHLLHHF BHHHHHHHHF BHHHHHHHHF
172-175    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
176-179    BHHHHHHHHF BHLLLLLLLF BHLHHHLHLF BHLHHHLHLF
180-183    BHHHHHLHLF BHHHHHLHLF BHHHHHLHLF BHHHHHLHLF
184-187    BHHHHHLHLF BHHHHLLLLF BHHHHHHHHF BHHHHHHHHF
188-191    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
192-195    BHHHHHHHHF BHHLLLHHHF BHHHLHHHHF BLHHLHHLHF
196-199    BHLHLHLHHF BHLHLHLHHF BHLHLHLHHF BHLLLLLHHF
200-203    BHHHLHHHHF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
204-207    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
208-211    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHLLLLLLLF
212-215    BHHHHHHHHF BHLLLLLLLF BHHHHHHHHF BHLLLLLLLF
216-219    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
220-223    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
224-227    BHHHHHHHHF BHHLLLHHHF BHHHLHHHHF BHHLLLLHLF
228-231    BHLHLHLHHF BHLHLHLHHF BHLHLHLHHF BHHLLLLHLF
232-235    BHHHLHHHHF BHHLLLHHHF BHHHHHHHHF BHHHHHHHHF
236-239    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
240-243    BHHHHHHHHF BHLHHHLHLF BHLLLLLHHF BHHLHHHLLF
244-247    BHHHHHHHHF BHHLLLHHHF BHHHHHHHHF BHLHHHLHLF
248-251    BHLLLLLHHF BHHLHHHLLF BHHHHHHHHF BHHHHHHHHF
252-255    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
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256-259   BHHHHHHHHHF BHHHHHLLLLF BHHHLHHLHF BHHHLHHLHF
260-263   BHHHLHHLHF BHHHLHHLHF BHHHHLLLLF BHHHHHHHHF
264-267   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
268-271   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
272-275   BHHHHHHHHF BHHHHHLHLF BHHHHHLLLF BHHHHHLHLF
276-279   BHHHHHLHLF BHHHHHLHLF BHHHHLLLLF BHHHHHHHHF
280-283   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
284-287   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
288-291   BHHHHHHHHF BHHHHLLLLF BHHHLHHLHF BHHHHLHHLF
292-295   BHHHHLLHHF BHHHHHHLHF BHHHLLLLHF BHHHHHHHHF
296-299   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
300-303   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
304-307   BHHHHHHHHF BHHHHLLLLF BHHHLHHHHF BHHHHLLHLF
308-311   BHHHLHHHHF BHHHLHHHHF BHHHHLLLLF BHHHHHHHHF
312-315   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
316-319   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
320-323   BHHHHHHHHF BHHHHHHLHF BHHHHLHLHF BHHHHLHLHF
324-327   BHHHLLLLHF BHHHHLHHHF BHHHHLHHHF BHHHHHHHHF
328-331   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
332-335   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
336-339   BHHHHHHHHF BHHHLLLLHF BHHHHHHLHF BHHHHLLLHF
340-343   BHHHLHHHHF BHHHLHHLHF BHHHHLLLLF BHHHHHHHHF
344-347   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
348-351   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
352-355   BHHHHHHHHF BHHHHLLLLF BHHHHHHLHF BHHHHHHLHF
356-359   BHHHLLLLHF BHHHLHHLHF BHHHLLLLHF BHHHHHHHHF
360-363   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
364-367   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
368-371   BHHHHHHHHF BHHHLLLLHF BHHHLHHHHF BHHHHLHHLF
372-375   BHHHHLHHHF BHHHHHLHLF BHHHHHLHHF BHHHHHHHHF
376-379   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
380-383   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
384-387   BHHHHHHHHF BHHHHLLLLF BHHHLHHLHF BHHHHLLLLF
388-391   BHHHLHHLHF BHHHLHHLHF BHHHHLLLLF BHHHHHHHHF
392-395   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
396-399   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
400-403   BHHHHHHHHF BHHHLLLLHF BHHHLHHLHF BHHHLLLLHF
404-407   BHHHLHHHHF BHHHLHHHHF BHHHHLLLLF BHHHHHHHHF
408-411   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
412-415   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
416-419   BHHHHHHHHF BHHLLLLLHLF BHLHHHLHHF BHLHHHHLLF
420-423   BHLHHHHLLF BHLHHHLHHF BHHLHHLHLF BHHLHLHHHF
424-427   BLHLHLHLHF BHLLHHLLLF BHHHHHHHHF BHHHHHHHHF
428-431   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
432-435   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHLHHHHF
436-439   BHHHLLHHLF BHHLHLHHHF BHHLHHLHLF BHLHHHLHHF
440-443   BHLHHHHLLF BLLHHHLLHF BHHHHHHHHF BHHHHHHHHF
444-447   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
448-451   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
452-455   BHHHHHHHHF BHLLHLLHHF BHLHLLHLLF BHLHLLHLLF
456-459   BHLLHLLHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
460-463   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
464-467   BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
468-471   BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHLHHF
472-475   BHHHHLLLLF BHHHHLLHHF BHHHHHHHHF BHHHHHHHHF
476-479   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
480-483   BHHHHHHHHF BHHHLHHHHF BHHHLLHHLF BHHHLHHHHF
484-487   BHLLLLLHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
488-491   BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF BHHHHHHHHF
492-495   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
496-499   BHHHHHHHHF BLLLLLLLLF BLHHHHLHHF BHHHHLHHHF
500-503   BHHHLHHHHF BHHLHHHHHF BHHHLHHHHF BHHHHLHHHF
504-507   BLHHHHLHHF BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF
508-511   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF E
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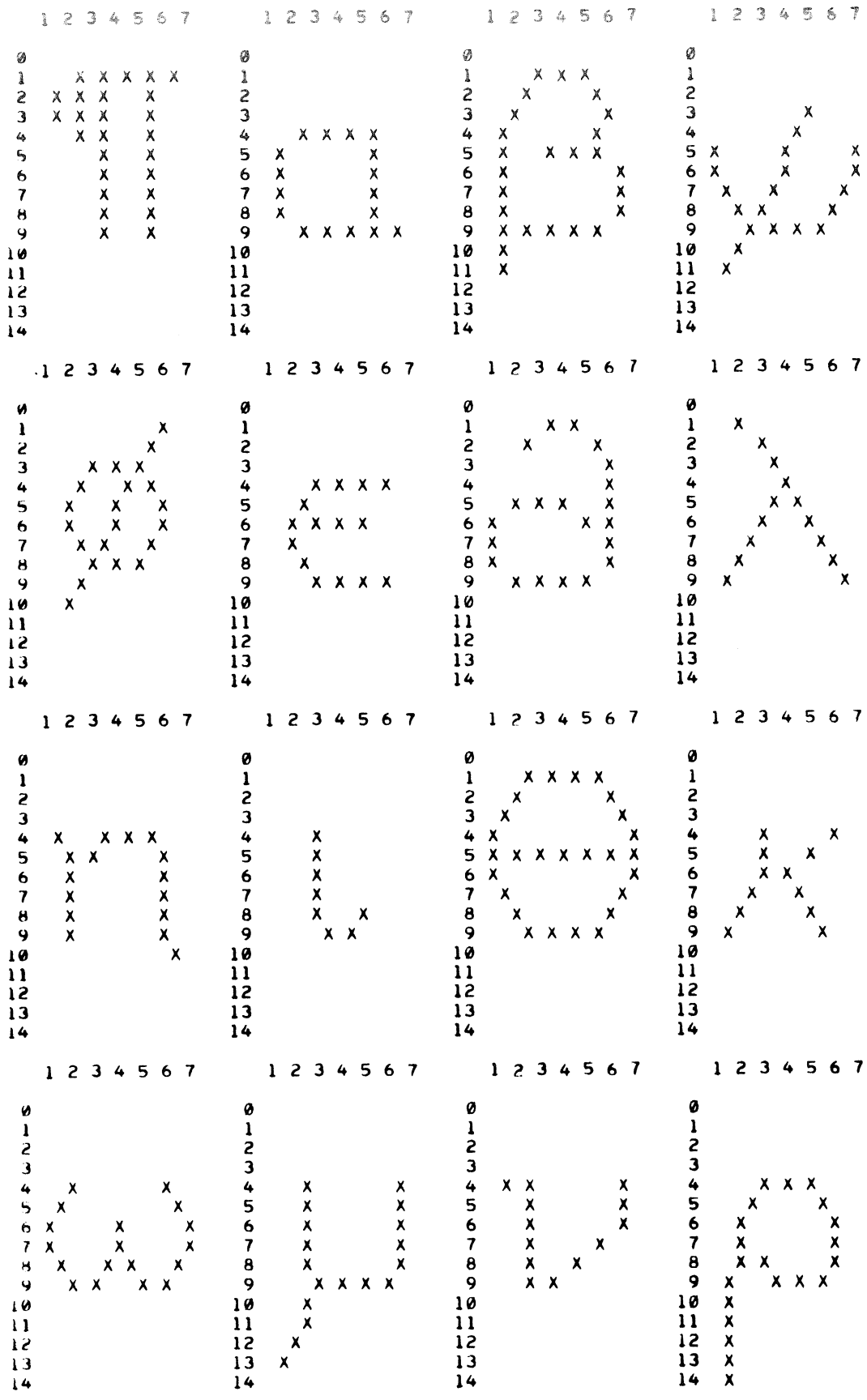
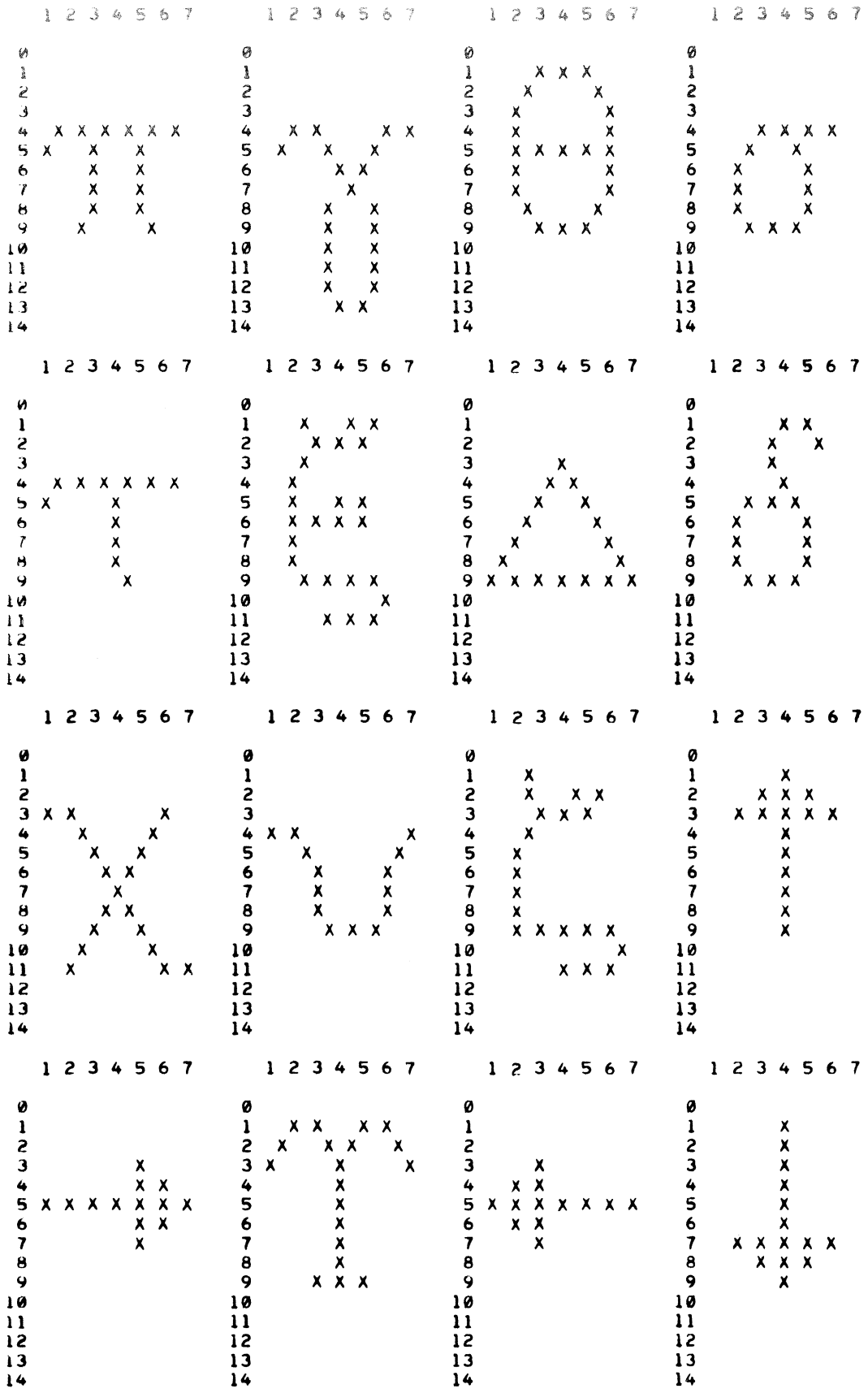
MATH SYMBOL SET @=(UNDERLINE) (100-137B)





MATH SYMBOL SET @=(UNDERLINE) (100-137B)

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2	LLLLHLHH	2	HHHHHHHH	2	LHLHHLHH	2	HHHHHHHH
3	LLLLHLHH	3	HHHHHHHH	3	HHLHHHLH	3	HHHHHLHH
4	LHLLHLHH	4	LHLLLLHH	4	LLHHHLHH	4	LHHHLHHH
5	LHHLHLHH	5	LLHHHLHH	5	LLHLLLHH	5	HLHHLHHL
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8	LHHLHLHH	8	LLHHHLHH	8	LLHHHHLH	8	HHLLHHLH
9	LHHLHLHH	9	LHLLLLLH	9	LLLLLLHH	9	LHLLLLHH
10	HHHHHHHH	10	HHHHHHHH	10	LLHHHHHH	10	HHLHHHHH
11	HHHHHHHH	11	HHHHHHHH	11	LLHHHHHH	11	LLHHHHHH
12	HHHHHHHH	12	HHHHHHHH	12	HHHHHHHH	12	HHHHHHHH
13	HHHHHHHH	13	HHHHHHHH	13	HHHHHHHH	13	HHHHHHHH
14	HHHHHHHH	14	HHHHHHHH	14	HHHHHHHH	14	HHHHHHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
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3	HHHLLLHH	3	HHHHHHHH	3	HHHHHHLH	3	LHHLHHHH
4	LHLHLLHH	4	HHHLLLLH	4	HHHHHHLH	4	HHHHLHHH
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15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
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4	LLHLLLHH	4	HHHLHHHH	4	HLHHHHHL	4	HHHLHHLH
5	HHLLHHLH	5	HHHLHHHH	5	HLLLLLLL	5	HHHLHLHH
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12	HHHHHHHH	12	HHHHHHHH	12	HHHHHHHH	12	HHHHHHHH
13	HHHHHHHH	13	HHHHHHHH	13	HHHHHHHH	13	HHHHHHHH
14	HHHHHHHH	14	HHHHHHHH	14	HHHHHHHH	14	HHHHHHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
0	HHHHHHHH	0	HHHHHHHH	0	HHHHHHHH	0	HHHHHHHH
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2	HHHHHHHH	2	HHHHHHHH	2	HHHHHHHH	2	HHHHHHHH
3	HHHHHHHH	3	HHHHHHHH	3	HHHHHHHH	3	HHHHHHHH
4	HHLHHHLH	4	LHLHHHLH	4	LLLHHHLH	4	HHHLLLHH
5	LLHHHHLH	5	LHLHHHLH	5	LHLHHHLH	5	LHLHHLHH
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7	HLHHLHHL	7	LHLHHHLH	7	LHLHHLHH	7	HHLHHHLH
8	LLHLLHLH	8	LHLHHHLH	8	LHLHLHHH	8	HHLLHHLH
9	HHLLHLLH	9	HHHLLLLH	9	LHLLHHHH	9	LLHLLLHH
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11	HHHHHHHH	11	LHLHHHHH	11	HHHHHHHH	11	LLHHHHHH
12	HHHHHHHH	12	HHLHHHHH	12	HHHHHHHH	12	LLHHHHHH
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14	HHHHHHHH	14	HHHHHHHH	14	HHHHHHHH	14	LLHHHHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567
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7	HHHLHLHH
8	HHHLHLHH
9	LHLHHLHH
10	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	01234567
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1	HHHHHHHH
2	HHHHHHHH
3	HHHHHHHH
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5	LLHLHLHH
6	HHHHLLHH
7	LHHHLHHH
8	LHHLHLHH
9	LHHLHLHH
10	LHHLHLHH
11	LHHLHLHH
12	LHHLHLHH
13	HHHHLLHH
14	HHHHHHHH
15	HHHHHHHH

	01234567
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3	HHLHHHLH
4	HHLHHHLH
5	HHLLLLLH
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7	HHLHHHLH
8	LHLHHLHH
9	HHHLLLHH
10	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	01234567
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2	HHHHHHHH
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5	LHLHLHHH
6	HHLHHLHH
7	HHLHHLHH
8	HHLHHLHH
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11	HHHHHHHH
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	01234567
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6	HHHHLHHH
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8	HHHHLHHH
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10	HHHHHHHH
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15	HHHHHHHH

	01234567
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	01234567
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	01234567
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12	HHHHHHHH
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15	HHHHHHHH

	01234567
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2	HHHHHHHH
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4	LHLHHLHH
5	HHHLHLHH
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13	HHHHHHHH
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15	HHHHHHHH

	01234567
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3	HHHHHHHH
4	HLLHHHHL
5	LHLHHHLH
6	HHHLHHLH
7	HHHLHHLH
8	HHHLHHLH
9	LHHLLLHH
10	HHHHHHHH
11	HHHHHHHH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	01234567
0	HHHHHHHH
1	LHLHHHHH
2	LHLHLLHH
3	HHHLLLHH
4	LHLHHHHH
5	HHLHHHHH
6	HHLHHHHH
7	HHLHHHHH
8	HHLHHHHH
9	HHLLLLLH
10	LHHHHHLH
11	HHHHLLLH
12	HHHHHHHH
13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	01234567
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2	HHHLLLHH
3	HHLLLLLH
4	HHHHLHHH
5	HHHHLHHH
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8	HHHHLHHH
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11	HHHHHHHH
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13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

	01234567
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2	HHHHHHHH
3	HHHHHLHH
4	HHHHHLLH
5	HLLLLLLL
6	HHHHHLLH
7	HHHHHLHH
8	HHHHHHHH
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11	HHHHHHHH
12	HHHHHHHH
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14	HHHHHHHH
15	HHHHHHHH

	01234567
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	01234567
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	01234567
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8	HHHLLLHH
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13	HHHHHHHH
14	HHHHHHHH
15	HHHHHHHH

```
MATH SYMBOL SET
HEWLETT-PACKARD CO.
@-(UNDERLINE)  (100-137B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGGG
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  4-  7     BHHLHLLLHLF BHHLHLHHLF BHHLHLHHLF BHHLHLHHLF
  8- 11     BHHLHLHHLHF BHHLHLHHLF BHHHHHHHHF BHHHHHHHHF
 12- 15     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 16- 19     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 20- 23     BHHLLLLLHLF BHHLHHHLLF BHHLHHHLLF BHHLHHHLLF
 24- 27     BHHLHHHLLF BHLLLLLLHLF BHHHHHHHHF BHHHHHHHHF
 28- 31     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 32- 35     BHHHHHHHHF BHHLLLHHHF BHHLHHLHLF BHLHHHLHHF
 36- 39     BHHLHHHLLF BHHLLLHLLF BHLHHHHLLF BHLHHHHLLF
 40- 43     BHLHHHHLLF BHHLLLLLLF BHHHHHHLLF BHHHHHHLLF
 44- 47     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 48- 51     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHLHHHHHF
 52- 55     BHHHLHHHLF BLHHLHHLHF BLHHLHHLHF BHLHHLHLLF
 56- 59     BHLHHLLHHF BHHLLLLHLF BHHHHHLHHF BHHHHHHLLF
 60- 63     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 64- 67     BHHHHHHHHF BHLHHHHHHF BHHLHHHHLF BHHLLLHHHF
 68- 71     BHHLLHLHLF BHLHLHLHHF BHLHLHLHHF BHHLHLLHLF
 72- 75     BHHLLLHHHF BHHHHHLHLF BHHHHHLHHF BHHHHHHHHF
 76- 79     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 80- 83     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 84- 87     BHLLLLHHHF BHHHHHLHLF BHHLLLLHHF BHHHHHLHHF
 88- 91     BHHHHHLHLF BHLLLLHHHF BHHHHHHHHF BHHHHHHHHF
 92- 95     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
 96- 99     BHHHHHHHHF BHHHLLHHLF BHHLHHLHLF BHLHHHHHHF
100-103     BHLHHHHHHF BHLHLLLHHF BHLLHHHLHF BHLHHHHLHF
104-107     BHLHHHHLHF BHHLLLLHHF BHHHHHHHHF BHHHHHHHHF
108-111     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
112-115     BHHHHHHHHF BHHHHHLHHF BHHHHLHHHF BHHHHLHHLF
116-119     BHHHLHHHHF BHHHLLHHLF BHHLHLHHHF BHHLHHLHLF
120-123     BHLHHHLHHF BHLHHHHLLF BHHHHHHHHF BHHHHHHHHF
124-127     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
128-131     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
132-135     BHHLLLHLLF BHLHHLLHHF BHLHHHLHHF BHLHHHLHHF
136-139     BHLHHHLHHF BHLHHHLHHF BHLHHHHHLF BHHHHHHHHF
140-143     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
144-147     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
148-151     BHHHHLHHHF BHHHHLHHHF BHHHHLHHHF BHHHHLHHHF
152-155     BHHLHLHHHF BHHHLLHHLF BHHHHHHHHF BHHHHHHHHF
156-159     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
160-163     BHHHHHHHHF BHHLLLLHLF BHLHHHLHHF BHLHHHHLLF
164-167     BLHHHHHLHF BLLLLLLLHF BLHHHHHLHF BHLHHHHLLF
168-171     BHLHHHLHHF BHHLLLLHLF BHHHHHHHHF BHHHHHHHHF
172-175     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
176-179     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
180-183     BHLHHLHHHF BHHLHLHHHF BHHHLLHHHF BHHHLHLHLF
184-187     BHHLHHLHHF BHHLHHHLLF BHHHHHHHHF BHHHHHHHHF
188-191     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
192-195     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
196-199     BHLHHHLHHF BHLHHHHLLF BLHHLHHLHF BLHHLHHLHF
200-203     BHLHLLHLLF BHLLHLLHHF BHHHHHHHHF BHHHHHHHHF
204-207     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
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216-219     BHLHHHLHLF BHLLLLHHHF BHHHHHLHLF BHHHHHLHLF
220-223     BHHHHHLHHF BHHHHHHLLF BHHHHHHHHF BHHHHHHHHF
224-227     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
228-231     BHLHHHLLLF BHLHHHLHLF BHLHHHLHLF BHHLHHLHLF
232-235     BHHHLHLHLF BHHHHLLHLF BHHHHHHHHF BHHHHHHHHF
236-239     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
240-243     BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
244-247     BHHLLLHHHF BHHLHHLHLF BHLHHHLHHF BHLHHHLHHF
248-251     BHLHHLLHHF BHHLLLHLLF BHHHHHHLLF BHHHHHHLLF
252-255     BHHHHHHLLF BHHHHHHLLF BHHHHHHLLF BHHHHHHHHF
```

256-259	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
260-263	BHLLLLLLLF	BHHLHLHLHF	BHHLHLHHHF	BHHLHLHHHF
264-267	BHHLHLHHHF	BHHLHHLHLF	BHHHHHHHHF	BHHHHHHHHF
268-271	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
272-275	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
276-279	BLLHHLLHHF	BHHLHLHLLF	BHHLLHHHHF	BHHHLHHHLF
280-283	BHHLHLHHLF	BHHLHLHHLF	BHHLHLHHLF	BHHLHLHHLF
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288-291	BHHHHHHHHF	BHHLLLHHHF	BHHLHHLHLF	BHLHHHLHHF
292-295	BHLHHHLHHF	BHLLLLLHHF	BHLHHHLHHF	BHLHHHLHHF
296-299	BHHLHHLHLF	BHHLLLHHHF	BHHHHHHHHF	BHHHHHHHHF
300-303	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
304-307	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
308-311	BHLLLLHHHF	BHHHLHLHLF	BHHLHHLHHF	BHHLHHLHHF
312-315	BHHLHHLHHF	BHHHLLLHLF	BHHHHHHHHF	BHHHHHHHHF
316-319	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
320-323	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
324-327	BHLLLLLLLF	BHHHLHHLHF	BHHHLHHHHF	BHHHLHHHHF
328-331	BHHHLHHHHF	BHHHLHHHLF	BHHHHHHHHF	BHHHHHHHHF
332-335	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
336-339	BHHHHHHHHF	BHHLLHLHLF	BHHLLLHHHF	BHHHHHLHLF
340-343	BHHHHHLHHF	BHHLLHLHHF	BHHLLLLHHF	BHHHHHLHHF
344-347	BHHHHHLHHF	BHHLLLLHLF	BHLHHHHHHF	BHHLLLHHLF
348-351	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
352-355	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHLHHHHF
356-359	BHHHLLHHLF	BHHLHLHHHF	BHHLHHLHLF	BHLHHHLHHF
360-363	BHLHHHHLLF	BLLLLLLLHF	BHHHHHHHHF	BHHHHHHHHF
364-367	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
368-371	BHHHHHHHHF	BHHLLHHHHF	BHHLHLHHLF	BHHHHLHHLF
372-375	BHHHLHHHHF	BHHHLLLHLF	BHHLHHLHHF	BHHLHHLHHF
376-379	BHHLHHLHHF	BHHHLLLHLF	BHHHHHHHHF	BHHHHHHHHF
380-383	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
384-387	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHLHHHLLHF
388-391	BHHLHHLHLF	BHHLHLHHHF	BHHHLLHHLF	BHHHLHHHHF
392-395	BHHHLLHHLF	BHHLHLHHHF	BHHLHHLHLF	BLLHHHLHHF
396-399	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
400-403	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
404-407	BLHHHHLLHF	BHLHHHLHLF	BHLHHLHHHF	BHLHHLHHHF
408-411	BHLHHLHHHF	BHHLLLHHLF	BHHHHHHHHF	BHHHHHHHHF
412-415	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
416-419	BHHHHHHHHF	BHHHHHLHLF	BHHLLHLHLF	BHHLLLHHHF
420-423	BHHHHHLHLF	BHHHHHLHHF	BHHHHHLHHF	BHHHHHLHHF
424-427	BHHHHHLHHF	BHLLLLLHHF	BHLHHHHHLF	BHLLLHHHHF
428-431	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
432-435	BHHHHHHHHF	BHHHLHHHHF	BHHLLLHHHF	BHLLLLLHHF
436-439	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
440-443	BHHHLHHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
444-447	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
448-451	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHLHHHHHF
452-455	BHLLHHHHHF	BLLLLLLLHF	BHLLHHHHHF	BHHLHHHHHF
456-459	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
460-463	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
464-467	BHHHHHHHHF	BHLLHLLHHF	BHLHLLHLLF	BLHHLHHLHF
468-471	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
472-475	BHHHLHHHHF	BHHLLLHHHF	BHHHHHHHHF	BHHHHHHHHF
476-479	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
480-483	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHLHHHF
484-487	BHHHHLLHHF	BLLLLLLLHF	BHHHHLLHHF	BHHHHLHHHF
488-491	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
492-495	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF
496-499	BHHHHHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF
500-503	BHHHLHHHHF	BHHHLHHHHF	BHHHLHHHHF	BHLLLLLHHF
504-507	BHHLLLHHHF	BHHHLHHHHF	BHHHHHHHHF	BHHHHHHHHF
508-511	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF	BHHHHHHHHF E

LINE DRAWING SET BITS 0-7 (SPACE)-? (40-77B)

CHARACTER 0

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10									
11									
12									
13									
14									

CHARACTER 1

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6				X	X	X			
7				X	X	X	X	X	X
8				X	X	X			
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 2

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6				X	X	X			
7	X	X	X	X	X	X			
8				X	X	X			
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 3

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 4

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9									
10									
11									
12									
13									
14									

CHARACTER 5

	0	1	2	3	4	5	6	7	8
0			X				X		
1			X				X		
2			X				X		
3			X				X		
4			X				X		
5			X				X		
6			X				X		
7			X				X	X	X
8			X				X		
9			X				X		
10			X				X		
11			X				X		
12			X				X		
13			X				X		
14			X				X		

CHARACTER 6

	0	1	2	3	4	5	6	7	8
0			X				X		
1			X				X		
2			X				X		
3			X				X		
4			X				X		
5			X				X		
6			X				X		
7	X	X	X				X		
8			X				X		
9			X				X		
10			X				X		
11			X				X		
12			X				X		
13			X				X		
14			X				X		

CHARACTER 7

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5	X	X	X	X	X	X	X	X	X
6									
7									
8									
9	X	X	X	X	X	X	X	X	X
10					X				
11					X				
12					X				
13					X				
14					X				

APPENDIX G Line Drawing Set PROM Listing

CHARACTER 8	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5	X	X	X	X	X	X	X	X	X
6									
7									
8									
9	X	X	X	X	X	X	X	X	X
10									
11									
12									
13									
14									

CHARACTER 9	0	1	2	3	4	5	6	7	8
0			X				X		
1			X				X		
2			X				X		
3			X				X		
4			X				X		
5			X				X		
6			X				X		
7			X				X		
8			X				X		
9			X				X		
10			X				X		
11			X				X		
12			X				X		
13			X				X		
14			X				X		

CHARACTER 10	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6				X	X	X			
7	X	X	X	X	X	X	X	X	X
8				X	X	X			
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 11	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 12	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X	X	X	X	X
8									
9									
10									
11									
12									
13									
14									

CHARACTER 13	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X	X	X	X	X

CHARACTER 14	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 15	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7	X	X	X	X	X	X	X	X	X
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

LINE DRAWING SET BITS 0-8 SPACE)-? (40-77B)

CHARACTER 16

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 17

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6				X	X	X	X	X	X
7				X	X	X	X	X	X
8				X	X	X	X	X	X
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 18

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6	X	X	X	X	X	X			
7	X	X	X	X	X	X			
8	X	X	X	X	X	X			
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 19

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 20

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9									
10									
11									
12									
13									
14									

CHARACTER 21

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X	X	X	X	X
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 22

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7	X	X	X	X	X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 23

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X	X	X	X	X
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 24 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7	X	X	X	X	X	X	X	X	X
8									
9									
10									
11									
12									
13									
14									

CHARACTER 25 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5	X	X	X	X	X	X	X	X	X
6									
7									
8									
9	X	X	X	X	X	X	X	X	X
10									
11									
12									
13									
14									

CHARACTER 26 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6				X	X	X			
7				X	X	X			
8				X	X	X			
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 27 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9									
10									
11									
12									
13									
14									

CHARACTER 28 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0			X				X		
1			X				X		
2			X				X		
3			X				X		
4			X				X		
5			X				X		
6			X				X		
7	X	X	X	X	X	X	X	X	X
8			X				X		
9			X				X		
10			X				X		
11			X				X		
12			X				X		
13			X				X		
14			X				X		

CHARACTER 29 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0					X	X	X	X	X
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 30 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5	X	X	X	X	X	X	X	X	X
6					X				
7					X				
8					X				
9	X	X	X	X	X	X	X	X	X
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 31 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0			X				X		
1			X				X		
2			X				X		
3			X				X		
4			X				X		
5	X	X	X	X	X	X	X	X	X
6			X				X		
7			X				X		
8			X				X		
9	X	X	X	X	X	X	X	X	X
10			X				X		
11			X				X		
12			X				X		
13			X				X		
14			X				X		

LINE DRAWING SET BITS 0-7 (SPACE)-? (40-77B)

	01234567		01234567		01234567		01234567
0	HHHHHHHH	0	HHHLLLHH	0	HHHLLLHH	0	HHHHHHHH
1	HHHHHHHH	1	HHHLLLHH	1	HHHLLLHH	1	HHHHHHHH
2	HHHHHHHH	2	HHHLLLHH	2	HHHLLLHH	2	HHHHHHHH
3	HHHHHHHH	3	HHHLLLHH	3	HHHLLLHH	3	HHHHHHHH
4	HHHHHHHH	4	HHHLLLHH	4	HHHLLLHH	4	HHHHHHHH
5	HHHHHHHH	5	HHHLLLHH	5	HHHLLLHH	5	HHHHHHHH
6	HHHHHHHH	6	HHHLLLHH	6	HHHLLLHH	6	LLLLLLLL
7	HHHHHHHH	7	HHHLLLLL	7	LLLLLLHH	7	LLLLLLLL
8	HHHHHHHH	8	HHHLLLHH	8	HHHLLLHH	8	LLLLLLLL
9	HHHHHHHH	9	HHHLLLHH	9	HHHLLLHH	9	HHHHLHHH
10	HHHHHHHH	10	HHHLLLHH	10	HHHLLLHH	10	HHHHLHHH
11	HHHHHHHH	11	HHHLLLHH	11	HHHLLLHH	11	HHHHLHHH
12	HHHHHHHH	12	HHHLLLHH	12	HHHLLLHH	12	HHHHLHHH
13	HHHHHHHH	13	HHHLLLHH	13	HHHLLLHH	13	HHHHLHHH
14	HHHHHHHH	14	HHHLLLHH	14	HHHLLLHH	14	HHHHLHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
0	HHHHLHHH	0	HHLHHHLH	0	HHLHHHLH	0	HHHHHHHH
1	HHHHLHHH	1	HHLHHHLH	1	HHLHHHLH	1	HHHHHHHH
2	HHHHLHHH	2	HHLHHHLH	2	HHLHHHLH	2	HHHHHHHH
3	HHHHLHHH	3	HHLHHHLH	3	HHLHHHLH	3	HHHHHHHH
4	HHHHLHHH	4	HHLHHHLH	4	HHLHHHLH	4	HHHHHHHH
5	HHHHLHHH	5	HHLHHHLH	5	HHLHHHLH	5	LLLLLLLL
6	LLLLLLLL	6	HHLHHHLH	6	HHLHHHLH	6	HHHHHHHH
7	LLLLLLLL	7	HHLHHHLL	7	LLLHHHLH	7	HHHHHHHH
8	LLLLLLLL	8	HHLHHHLH	8	HHLHHHLH	8	HHHHHHHH
9	HHHHHHHH	9	HHLHHHLH	9	HHLHHHLH	9	LLLLLLLL
10	HHHHHHHH	10	HHLHHHLH	10	HHLHHHLH	10	HHHHLHHH
11	HHHHHHHH	11	HHLHHHLH	11	HHLHHHLH	11	HHHHLHHH
12	HHHHHHHH	12	HHLHHHLH	12	HHLHHHLH	12	HHHHLHHH
13	HHHHHHHH	13	HHLHHHLH	13	HHLHHHLH	13	HHHHLHHH
14	HHHHHHHH	14	HHLHHHLH	14	HHLHHHLH	14	HHHHLHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
0	HHHHLHHH	0	HHLHHHLH	0	HHHLLLHH	0	HHHHLHHH
1	HHHHLHHH	1	HHLHHHLH	1	HHHLLLHH	1	HHHHLHHH
2	HHHHLHHH	2	HHLHHHLH	2	HHHLLLHH	2	HHHHLHHH
3	HHHHLHHH	3	HHLHHHLH	3	HHHLLLHH	3	HHHHLHHH
4	HHHHLHHH	4	HHLHHHLH	4	HHHLLLHH	4	HHHHLHHH
5	LLLLLLLL	5	HHLHHHLH	5	HHHLLLHH	5	HHHHLHHH
6	HHHHHHHH	6	HHLHHHLH	6	HHHLLLHH	6	LLLLLLLL
7	HHHHHHHH	7	HHLHHHLH	7	LLLLLLLL	7	LLLLLLLL
8	HHHHHHHH	8	HHLHHHLH	8	HHHLLLHH	8	LLLLLLLL
9	LLLLLLLL	9	HHLHHHLH	9	HHHLLLHH	9	HHHHLHHH
10	HHHHHHHH	10	HHLHHHLH	10	HHHLLLHH	10	HHHHLHHH
11	HHHHHHHH	11	HHLHHHLH	11	HHHLLLHH	11	HHHHLHHH
12	HHHHHHHH	12	HHLHHHLH	12	HHHLLLHH	12	HHHHLHHH
13	HHHHHHHH	13	HHLHHHLH	13	HHHLLLHH	13	HHHHLHHH
14	HHHHHHHH	14	HHLHHHLH	14	HHHLLLHH	14	HHHHLHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
0	HHHHHHHH	0	HHHHLHHH	0	HHHHLHHH	0	HHHHLHHH
1	HHHHHHHH	1	HHHHLHHH	1	HHHHLHHH	1	HHHHLHHH
2	HHHHHHHH	2	HHHHLHHH	2	HHHHLHHH	2	HHHHLHHH
3	HHHHHHHH	3	HHHHLHHH	3	HHHHLHHH	3	HHHHLHHH
4	HHHHHHHH	4	HHHHLHHH	4	HHHHLHHH	4	HHHHLHHH
5	HHHHHHHH	5	HHHHLHHH	5	HHHHLHHH	5	HHHHLHHH
6	HHHHHHHH	6	HHHHLHHH	6	HHHHLHHH	6	HHHHLHHH
7	LLLLLLLL	7	HHHHLHHH	7	HHHHLHHH	7	LLLLLLLL
8	HHHHHHHH	8	HHHHLHHH	8	HHHHLHHH	8	HHHHLHHH
9	HHHHHHHH	9	HHHHLHHH	9	HHHHLHHH	9	HHHHLHHH
10	HHHHHHHH	10	HHHHLHHH	10	HHHHLHHH	10	HHHHLHHH
11	HHHHHHHH	11	HHHHLHHH	11	HHHHLHHH	11	HHHHLHHH
12	HHHHHHHH	12	HHHHLHHH	12	HHHHLHHH	12	HHHHLHHH
13	HHHHHHHH	13	HHHHLHHH	13	HHHHLHHH	13	HHHHLHHH
14	HHHHHHHH	14	HHHHLLLL	14	HHHHLHHH	14	HHHHLHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

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   01234567
0  HHHLLLHH
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7  LLLLLLLL
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6  HHHHLHHH
7  HHHHLHHH
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9  LLLLLLLL
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   01234567
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4  HHLHHHLH
5  LLLLLLLL
6  HHLHHHLH
7  HHLHHHLH
8  HHLHHHLH
9  LLLLLLLL
10 HHLHHHLH
11 HHLHHHLH
12 HHLHHHLH
13 HHLHHHLH
14 HHLHHHLH
15 HHHHHHHH
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LINE DRAWING SET BITS 0-7
HEWLETT-PACKARD CO.
(SPACE)-?  (40-776)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGG
000-003  S BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
004-007    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
008-011    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
012-015    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
016-019    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
020-023    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BLLLLLHHHF
024-027    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
028-031    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
032-035    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
036-039    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLLLLF
040-043    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
044-047    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
048-051    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
052-055    BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF BLLLLLLLLF
056-059    BLLLLLLLLF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
060-063    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
064-067    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
068-071    BHHHLHHHHF BHHHLHHHHF BLLLLLLLLF BLLLLLLLLF
072-075    BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
076-079    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
080-083    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
084-087    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BLLHHHLHHF
088-091    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
092-095    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHHHHHHHHF
096-099    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
100-103    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLLLF
104-107    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
108-111    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHHHHHHHHF
112-115    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
116-119    BHHHHHHHHF BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF
120-123    BHHHHHHHHF BLLLLLLLLF BHHHLHHHHF BHHHLHHHHF
124-127    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
128-131    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
132-135    BHHHLHHHHF BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF
136-139    BHHHHHHHHF BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF
140-143    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
144-147    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
148-151    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
152-155    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
156-159    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHHHHHHHHF
160-163    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
164-167    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BLLLLLLLLF
168-171    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
172-175    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
176-179    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
180-183    BHHHLHHHHF BHHHLHHHHF BLLLLLLLLF BLLLLLLLLF
184-187    BLLLLLLLLF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
188-191    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
192-195    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
196-199    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF
200-203    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
204-207    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
208-211    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
212-215    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
216-219    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
220-223    BHHHLHHHHF BHHHLHHHHF BLLLLHHHHF BHHHHHHHHF
224-227    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
228-231    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
232-235    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
236-239    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
240-243    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
244-247    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BLLLLLLLLF
248-251    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
252-255    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
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256-259    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
260-263    BHHLLLHHHF BHHLLLHHHF BLLLLLLLLF BLLLLLLLLF
264-267    BLLLLLLLLF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
268-271    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
272-275    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
276-279    BHHLLLHHHF BHHLLLHHHF BLLLLLHHHF BLLLLLHHHF
280-283    BLLLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
284-287    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
288-291    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
292-295    BHHLLLHHHF BHHLLLHHHF BHHLLLLLLF BHHLLLLLLF
296-299    BHHLLLLLLF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
300-303    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
304-307    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
308-311    BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF BLLLLLLLLF
312-315    BLLLLLLLLF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
316-319    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
320-323    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
324-327    BHHLLLHHHF BHHLLLHHHF BLLLLLLLLF BLLLLLLLLF
328-331    BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
332-335    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
336-339    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
340-343    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BLLLLHHHHF
344-347    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
348-351    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
352-355    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
356-359    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLLLLLF
360-363    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
364-367    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
368-371    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
372-375    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF
376-379    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
380-383    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
384-387    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
388-391    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BLLLLLLLLF
392-395    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
396-399    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
400-403    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
404-407    BHHHHHHHHF BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF
408-411    BHHHHHHHHF BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF
412-415    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
416-419    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
420-423    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
424-427    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
428-431    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
432-435    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
436-439    BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF BLLLLLLLLF
440-443    BLLLLLLLLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
444-447    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
448-451    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
452-455    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BLLLLLLLLF
456-459    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
460-463    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHHHHHHHHF
464-467    BLLLLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
468-471    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
472-475    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
476-479    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
480-483    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
484-487    BHHHLHHHHF BLLLLLLLLF BHHHLHHHHF BHHHLHHHHF
488-491    BHHHLHHHHF BLLLLLLLLF BHHHLHHHHF BHHHLHHHHF
492-495    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
496-499    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
500-503    BHLHHHLHHF BLLLLLLLLF BHLHHHLHHF BHLHHHLHHF
504-507    BHLHHHLHHF BLLLLLLLLF BHLHHHLHHF BHLHHHLHHF
508-511    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHHHHHHHHF E
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LINE DRAWING SET BITS 0-8 @-(UNDERLINE) (100-137B)

CHARACTER 0

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X	X	X	X	X
6					X				
7					X				
8					X				
9					X	X	X	X	X
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 1

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6				X	X	X	X	X	X
7				X	X	X	X	X	X
8				X	X	X	X	X	X
9									
10									
11									
12									
13									
14									

CHARACTER 2

	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6	X	X	X	X	X	X			
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X			
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 3

	0	1	2	3	4	5	6	7	8
0	X	X	X	X	X	X	X	X	X
1	X	X	X	X	X	X	X	X	X
2	X	X	X	X	X	X	X	X	X
3	X	X	X	X	X	X	X	X	X
4	X	X	X	X	X	X	X	X	X
5	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X

CHARACTER 4

	0	1	2	3	4	5	6	7	8
0	X	X	X	X	X	X			
1	X	X	X	X	X	X			
2	X	X	X	X	X	X			
3	X	X	X	X	X	X			
4	X	X	X	X	X	X			
5	X	X	X	X	X	X			
6	X	X	X	X	X	X			
7	X	X	X	X	X	X			
8	X	X	X	X	X	X			
9	X	X	X	X	X	X			
10	X	X	X	X	X	X			
11	X	X	X	X	X	X			
12	X	X	X	X	X	X			
13	X	X	X	X	X	X			
14	X	X	X	X	X	X			

CHARACTER 5

	0	1	2	3	4	5	6	7	8
0	X	X	X						
1	X	X	X						
2	X	X	X						
3	X	X	X						
4	X	X	X						
5	X	X	X						
6	X	X	X						
7	X	X	X						
8	X	X	X						
9	X	X	X						
10	X	X	X						
11	X	X	X						
12	X	X	X						
13	X	X	X						
14	X	X	X						

CHARACTER 6

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X	X	X	X	X
8									
9									
10									
11									
12									
13									
14									

CHARACTER 7

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7	X	X	X	X	X				
8									
9									
10									
11									
12									
13									
14									

CHARACTER 8

DOT COLUMN	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X	X	X	X	X
8									X
9									X
10									X
11									X
12									
13									
14									

CHARACTER 9

DOT COLUMN	0	1	2	3	4	5	6	7	8
0	X	X	X	X	X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X				
8					X				
9					X				
10	X	X	X	X	X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 10

DOT COLUMN	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X	X	X	X	X
8						X			
9						X			
10						X			
11						X			
12									
13									
14									

CHARACTER 11

DOT COLUMN	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X	X	X	X	X
8			X						X
9			X						X
10			X						X
11			X						X
12									
13									
14									

CHARACTER 12

DOT COLUMN	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X	X	X	X	X
8			X			X			X
9			X			X			X
10			X			X			X
11			X			X			X
12									
13									
14									

CHARACTER 13

DOT COLUMN	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 14

DOT COLUMN	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 15

DOT COLUMN	0	1	2	3	4	5	6	7	8
0	X	X	X	X	X				
1					X				
2					X				
3					X				
4					X				
5	X	X	X	X	X				
6					X				
7					X				
8					X				
9					X				
10	X	X	X	X	X				
11					X				
12					X				
13					X				
14					X				

LINE DRAWING SET BITS 0-8 @-(UNDERLINE) (100-137B)

CHARACTER	DOT COLUMN								
16	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14	X	X	X	X	X				

CHARACTER	DOT COLUMN								
17	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6						X	X	X	X	X	X
7						X	X	X	X	X	X
8						X	X	X	X	X	X
9						X	X	X			
10						X	X	X			
11						X	X	X			
12						X	X	X			
13						X	X	X			
14						X	X	X			

CHARACTER	DOT COLUMN								
18	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7					X	X	X	X	X
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER	DOT COLUMN								
19	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6	X	X	X	X	X	X			
7	X	X	X	X	X	X			
8	X	X	X	X	X	X			
9									
10									
11									
12									
13									
14									

CHARACTER	DOT COLUMN								
20	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER	DOT COLUMN								
21	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5	X	X	X	X	X				
6					X				
7					X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER	DOT COLUMN								
22	0	1	2	3	4	5	6	7	8
0				X	X	X			
1				X	X	X			
2				X	X	X			
3				X	X	X			
4				X	X	X			
5				X	X	X			
6				X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8				X	X	X	X	X	X
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER	DOT COLUMN								
23	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6	X	X	X	X	X	X			
7	X	X	X	X	X	X			
8	X	X	X	X	X	X			
9				X	X	X			
10				X	X	X			
11				X	X	X			
12				X	X	X			
13				X	X	X			
14				X	X	X			

CHARACTER 24 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5	X	X	X	X	X	X	X	X	X
6	X	X	X	X	X	X	X	X	X
7	X	X	X	X	X	X	X	X	X
8	X	X	X	X	X	X	X	X	X
9	X	X	X	X	X	X	X	X	X
10	X	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X

CHARACTER 25 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0	X	X	X	X	X				
1					X				
2					X				
3					X				
4					X				
5					X				
6					X				
7					X				
8					X				
9					X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 26 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7									
8									
9									
10	X	X	X	X	X	X	X	X	X
11	X	X	X	X	X	X	X	X	X
12	X	X	X	X	X	X	X	X	X
13	X	X	X	X	X	X	X	X	X
14	X	X	X	X	X	X	X	X	X

CHARACTER 27 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0					X				
1					X				
2					X				
3					X				
4					X				
5	X	X	X	X	X				
6					X				
7					X				
8					X				
9	X	X	X	X	X				
10					X				
11					X				
12					X				
13					X				
14					X				

CHARACTER 28 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X				X	X	X
8									
9									
10									
11									
12									
13									
14									

CHARACTER 29 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0			X				X		
1			X				X		
2			X				X		
3			X				X		
4			X				X		
5			X				X		
6			X				X		
7	X	X	X	X	X	X	X	X	X
8									
9									
10									
11									
12									
13									
14									

CHARACTER 30 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7				X	X	X			
8									
9									
10									
11									
12									
13									
14									

CHARACTER 31 — DOT COLUMN

	0	1	2	3	4	5	6	7	8
0									
1									
2									
3									
4									
5									
6									
7	X	X	X	X	X	X	X	X	X
8			X				X		
9			X				X		
10			X				X		
11			X				X		
12			X				X		
13			X				X		
14			X				X		

LINE DRAWING SET BITS 0-7 @=(UNDERLINE) (100-137B)

	01234567		01234567		01234567		01234567
0	HHHHLHHH	0	HHHLLLHH	0	HHHLLLHH	0	LLLLLLLL
1	HHHHLHHH	1	HHHLLLHH	1	HHHLLLHH	1	LLLLLLLL
2	HHHHLHHH	2	HHHLLLHH	2	HHHLLLHH	2	LLLLLLLL
3	HHHHLHHH	3	HHHLLLHH	3	HHHLLLHH	3	LLLLLLLL
4	HHHHLHHH	4	HHHLLLHH	4	HHHLLLHH	4	LLLLLLLL
5	HHHHLLLL	5	HHHLLLHH	5	HHHLLLHH	5	LLLLLLLL
6	HHHHLHHH	6	HHHLLLLL	6	LLLLLLHH	6	LLLLLLLL
7	HHHHLHHH	7	HHHLLLLL	7	LLLLLLLL	7	LLLLLLLL
8	HHHHLHHH	8	HHHLLLLL	8	LLLLLLHH	8	LLLLLLLL
9	HHHHLLLL	9	HHHHHHHH	9	HHHLLLHH	9	LLLLLLLL
10	HHHHLHHH	10	HHHHHHHH	10	HHHLLLHH	10	LLLLLLLL
11	HHHHLHHH	11	HHHHHHHH	11	HHHLLLHH	11	LLLLLLLL
12	HHHHLHHH	12	HHHHHHHH	12	HHHLLLHH	12	LLLLLLLL
13	HHHHLHHH	13	HHHHHHHH	13	HHHLLLHH	13	LLLLLLLL
14	HHHHLHHH	14	HHHHHHHH	14	HHHLLLHH	14	LLLLLLLL
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
0	LLLLLLHH	0	LLLHHHHH	0	HHHHLHHH	0	HHHHLHHH
1	LLLLLLHH	1	LLLHHHHH	1	HHHHLHHH	1	HHHHLHHH
2	LLLLLLHH	2	LLLHHHHH	2	HHHHLHHH	2	HHHHLHHH
3	LLLLLLHH	3	LLLHHHHH	3	HHHHLHHH	3	HHHHLHHH
4	LLLLLLHH	4	LLLHHHHH	4	HHHHLHHH	4	HHHHLHHH
5	LLLLLLHH	5	LLLHHHHH	5	HHHHLHHH	5	HHHHLHHH
6	LLLLLLHH	6	LLLHHHHH	6	HHHHLHHH	6	HHHHLHHH
7	LLLLLLHH	7	LLLHHHHH	7	HHHHLLLL	7	LLLLLHHH
8	LLLLLLHH	8	LLLHHHHH	8	HHHHHHHH	8	HHHHHHHH
9	LLLLLLHH	9	LLLHHHHH	9	HHHHHHHH	9	HHHHHHHH
10	LLLLLLHH	10	LLLHHHHH	10	HHHHHHHH	10	HHHHHHHH
11	LLLLLLHH	11	LLLHHHHH	11	HHHHHHHH	11	HHHHHHHH
12	LLLLLLHH	12	LLLHHHHH	12	HHHHHHHH	12	HHHHHHHH
13	LLLLLLHH	13	LLLHHHHH	13	HHHHHHHH	13	HHHHHHHH
14	LLLLLLHH	14	LLLHHHHH	14	HHHHHHHH	14	HHHHHHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
0	HHHHHHHH	0	LLLLLHHH	0	HHHHHHHH	0	HHHHHHHH
1	HHHHHHHH	1	HHHHLHHH	1	HHHHHHHH	1	HHHHHHHH
2	HHHHHHHH	2	HHHHLHHH	2	HHHHHHHH	2	HHHHHHHH
3	HHHHHHHH	3	HHHHLHHH	3	HHHHHHHH	3	HHHHHHHH
4	HHHHHHHH	4	HHHHLHHH	4	HHHHHHHH	4	HHHHHHHH
5	HHHHHHHH	5	HHHHLHHH	5	HHHHHHHH	5	HHHHHHHH
6	HHHHHHHH	6	HHHHLHHH	6	HHHHHHHH	6	HHHHHHHH
7	LLLLLLLL	7	HHHHLHHH	7	LLLLLLLL	7	LLLLLLLL
8	HHHHHHHH	8	HHHHLHHH	8	HHHHHLHH	8	HHLHHHHH
9	HHHHHHHH	9	HHHHLHHH	9	HHHHHLHH	9	HHLHHHHH
10	HHHHHHHH	10	LLLLLHHH	10	HHHHHLHH	10	HHLHHHHH
11	HHHHHHHH	11	HHHHLHHH	11	HHHHHLHH	11	HHLHHHHH
12	HHHHHHHH	12	HHHHLHHH	12	HHHHHHHH	12	HHHHHHHH
13	HHHHHHHH	13	HHHHLHHH	13	HHHHHHHH	13	HHHHHHHH
14	HHHHHHHH	14	HHHHLHHH	14	HHHHHHHH	14	HHHHHHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

	01234567		01234567		01234567		01234567
0	HHHHHHHH	0	HHHLLLHH	0	HHHHLHHH	0	LLLLLHHH
1	HHHHHHHH	1	HHHLLLHH	1	HHHHLHHH	1	HHHHLHHH
2	HHHHHHHH	2	HHHLLLHH	2	HHHHLHHH	2	HHHHLHHH
3	HHHHHHHH	3	HHHLLLHH	3	HHHHLHHH	3	HHHHLHHH
4	HHHHHHHH	4	HHHLLLHH	4	HHHHLHHH	4	HHHHLHHH
5	HHHHHHHH	5	HHHLLLHH	5	HHHHLHHH	5	LLLLLHHH
6	HHHHHHHH	6	LLLLLLLL	6	LLLLLLLL	6	HHHHLHHH
7	LLLLLLLL	7	LLLLLLLL	7	LLLLLLLL	7	HHHHLHHH
8	HHLHHLHH	8	LLLLLLLL	8	LLLLLLLL	8	HHHHLHHH
9	HHLHHLHH	9	HHHHLHHH	9	HHHLLLHH	9	HHHHLHHH
10	HHLHHLHH	10	HHHHLHHH	10	HHHLLLHH	10	LLLLLHHH
11	HHLHHLHH	11	HHHHLHHH	11	HHHLLLHH	11	HHHHLHHH
12	HHHHHHHH	12	HHHHLHHH	12	HHHLLLHH	12	HHHHLHHH
13	HHHHHHHH	13	HHHHLHHH	13	HHHLLLHH	13	HHHHLHHH
14	HHHHHHHH	14	HHHHLHHH	14	HHHLLLHH	14	HHHHLHHH
15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH	15	HHHHHHHH

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14 HHLHHHLH
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LINE DRAWING SET BITS 0-7
HEWLETT-PACKARD CO.
@-(UNDERLINE)  (100-137B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGG
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004-007    BHHHLHHHHF BLLLLHHHHF BHHHLHHHHF BHHHLHHHHF
008-011    BHHHLHHHHF BLLLLHHHHF BHHHLHHHHF BHHHLHHHHF
012-015    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
016-019    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
020-023    BHHLLLHHHF BHHLLLHHHF BLLLLLHHHF BLLLLLHHHF
024-027    BLLLLLHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
028-031    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
032-035    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
036-039    BHHLLLHHHF BHHLLLHHHF BHHLLLLLLF BLLLLLLLLF
040-043    BHHLLLLLLF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
044-047    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
048-051    BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF
052-055    BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF
056-059    BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF
060-063    BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF BHHHHHHHHF
064-067    BHHLLLLLLF BHHLLLLLLF BHHLLLLLLF BHHLLLLLLF
068-071    BHHLLLLLLF BHHLLLLLLF BHHLLLLLLF BHHLLLLLLF
072-075    BHHLLLLLLF BHHLLLLLLF BHHLLLLLLF BHHLLLLLLF
076-079    BHHLLLLLLF BHHLLLLLLF BHHLLLLLLF BHHHHHHHHF
080-083    BHHHHHLLLF BHHHHHLLLF BHHHHHLLLF BHHHHHLLLF
084-087    BHHHHHLLLF BHHHHHLLLF BHHHHHLLLF BHHHHHLLLF
088-091    BHHHHHLLLF BHHHHHLLLF BHHHHHLLLF BHHHHHLLLF
092-095    BHHHHHLLLF BHHHHHLLLF BHHHHHLLLF BHHHHHHHHF
096-099    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
100-103    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BLLLLHHHHF
104-107    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
108-111    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
112-115    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
116-119    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLLLLLF
120-123    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
124-127    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
128-131    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
132-135    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF
136-139    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
140-143    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
144-147    BHHHLLLLLF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
148-151    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
152-155    BHHHLHHHHF BHHHLHHHHF BHHHLLLLLF BHHHLHHHHF
156-159    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
160-163    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
164-167    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF
168-171    BHHLHHHHHF BHHLHHHHHF BHHLHHHHHF BHHLHHHHHF
172-175    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
176-179    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
180-183    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF
184-187    BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF
188-191    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
192-195    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
196-199    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF
200-203    BHHLHHLHHF BHHLHHLHHF BHHLHHLHHF BHHLHHLHHF
204-207    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
208-211    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
212-215    BHHLLLHHHF BHHLLLHHHF BLLLLLLLLF BLLLLLLLLF
216-219    BLLLLLLLLF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
220-223    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
224-227    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
228-231    BHHHLHHHHF BHHHLHHHHF BLLLLLLLLF BLLLLLLLLF
232-235    BLLLLLLLLF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
236-239    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
240-243    BHHHLLLLLF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
244-247    BHHHLHHHHF BHHHLLLLLF BHHHLHHHHF BHHHLHHHHF
248-251    BHHHLHHHHF BHHHLHHHHF BHHHLLLLLF BHHHLHHHHF
252-255    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
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256-259    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
260-263    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
264-267    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
268-271    BHHHLHHHHF BHHHLHHHHF BHHHLLLLLF BHHHHHHHHF
272-275    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
276-279    BHHHHHHHHF BHHHHHHHHF BLLLLLHHHF BLLLLLHHHF
280-283    BLLLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
284-287    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
288-291    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
292-295    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLHHHHF
296-299    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
300-303    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
304-307    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
308-311    BHHLLLHHHF BHHLLLHHHF BHHLLLLLLF BHHLLLLLLF
312-315    BHHLLLLLLF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
316-319    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
320-323    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
324-327    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHLLLLLF
328-331    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
332-335    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
336-339    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
340-343    BHHHLHHHHF BHHHLLLLLF BHHHLHHHHF BHHHLHHHHF
344-347    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
348-351    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
352-355    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
356-359    BHHLLLHHHF BHHLLLHHHF BLLLLLHHHF BLLLLLLLLF
360-363    BLLLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
364-367    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
368-371    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
372-375    BHHHHHHHHF BHHHHHHHHF BHHLLLLLLF BHHLLLLLLF
376-379    BHHLLLLLLF BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF
380-383    BHHLLLHHHF BHHLLLHHHF BHHLLLHHHF BHHHHHHHHF
384-387    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
388-391    BHHHHHHHHF BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF
392-395    BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF
396-399    BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF BHHHHHHHHF
400-403    BHHHLLLLLF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
404-407    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
408-411    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
412-415    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHHHHHHF
416-419    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
420-423    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
424-427    BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF BLLLLLLLLF
428-431    BLLLLLLLLF BLLLLLLLLF BLLLLLLLLF BHHHHHHHHF
432-435    BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF BHHHLHHHHF
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448-451    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
452-455    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLHHHLLLF
456-459    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
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480-483    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
484-487    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHLLLHHHF
488-491    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
492-495    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
496-499    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
500-503    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BLLLLLLLLF
504-507    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF
508-511    BHLHHHLHHF BHLHHHLHHF BHLHHHLHHF BHHHHHHHHF E
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LINE DRAWING SET BIT 8 (NUL-DEL) (000-177B)

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 4 HHHHHHHH      4 HHHHHHHH      4 HHHHHHHH      4 HHLHHHHH
 5 HHLHHHHH      5 HHHHHHHH      5 HHHHHHHH      5 HHLHHHHH
 6 HHHHHHHH      6 HHLHHHHH      6 HHHHHHHH      6 HLLHHHHH
 7 HHHHHHHH      7 HLLHHHHH      7 HHLHHHHH      7 HLLHHHHH
 8 HHHHHHHH      8 HHLHHHHH      8 HHHHHHHH      8 HLLHHHHH
 9 HHLHHHHH      9 HHHHHHHH      9 HHHHHHHH      9 HHLHHHHH
10 HHHHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHLHHHHH
11 HHHHHHHH     11 HHHHHHHH     11 HHHHHHHH     11 HHLHHHHH
12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHLHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHLHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHLHHHHH
15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH

   01234567        01234567        01234567        01234567

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 5 HHHHHHHH      5 HHHHHHHH      5 HHHHHHHH      5 HLHHHHHH
 6 HLHHHHHH      6 HHHHHHHH      6 HHHHHHHH      6 HHHHHHHH
 7 HLHHHHHH      7 HLHHHHHH      7 HHLHHHHH      7 HHHHHHHH
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12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH     12 HHHHHHHH
13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH     14 HHHHHHHH
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   01234567        01234567        01234567        01234567

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 3 HHHHHHHH      3 HHHHHHHH      3 HHHHHHHH      3 HHHHHHHH
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 5 HLHHHHHH      5 HHHHHHHH      5 HHHHHHHH      5 HHHHHHHH
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 9 HLLHHHHH      9 HHHHHHHH      9 HHHHHHHH      9 HHLHHHHH
10 HHLHHHHH     10 HHHHHHHH     10 HHHHHHHH     10 HHLHHHHH
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13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH     13 HHHHHHHH
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   01234567        01234567        01234567        01234567

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15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH     15 HHHHHHHH
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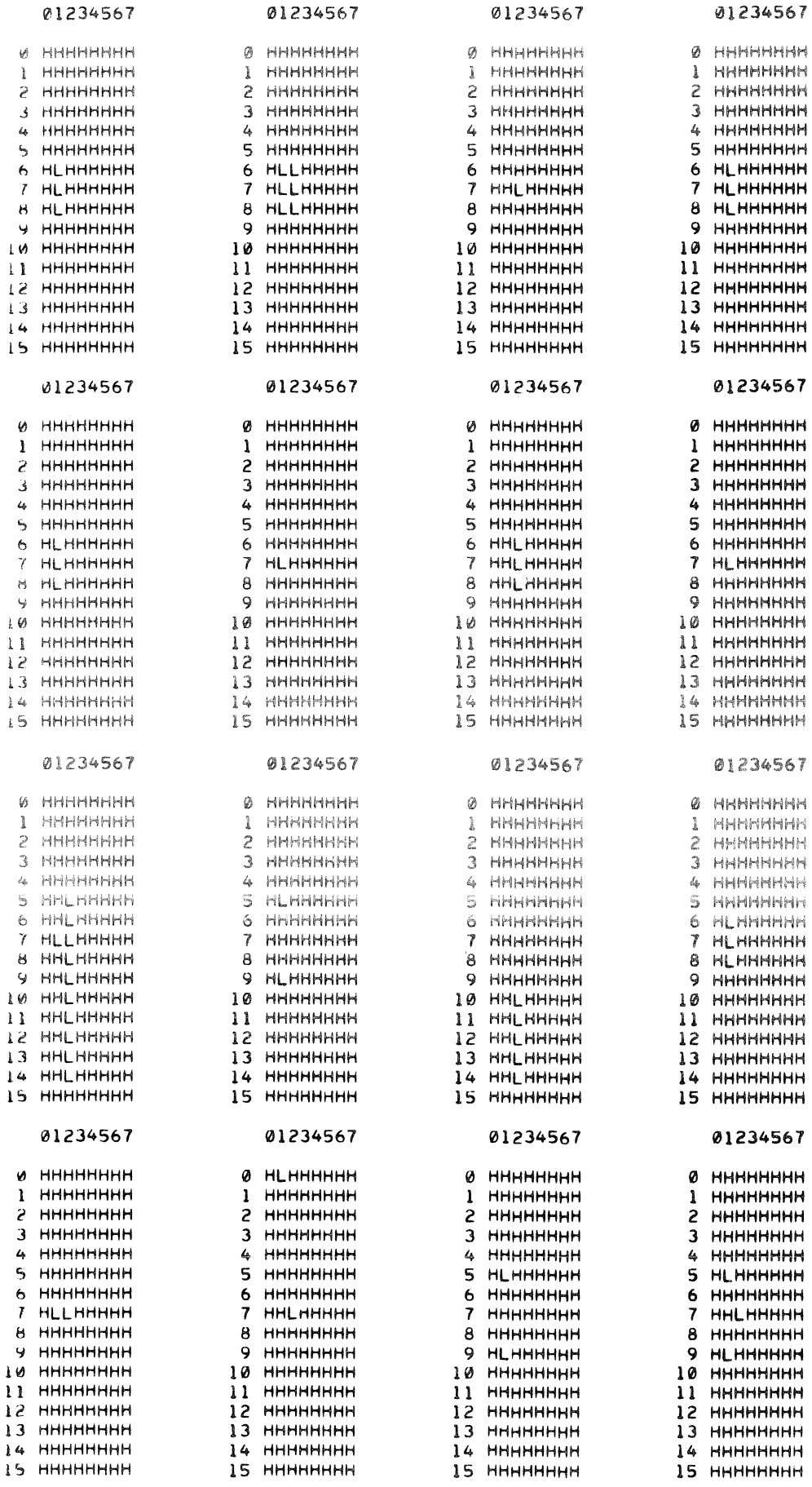
01234567
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9 HLHHHHHH
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LINE DRAWING SET BIT 8
HEWLETT-PACKARD CO.
(NUL-DEL)  (000-177B)
MMI 4K PROM FORMAT
GGGGGGGGGGGGGGGGGGGGGGGGGGGGGG
004-007    BHHHHHHHHF BHHHHHLHHF BHHHHHHHHF BHHHHHHHHF
008-011    BHHHHHHHHF BHHHHHLHHF BHHHHHHHHF BHHHHHHHHF
012-015    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
016-019    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
020-023    BHHHHHHHHF BHHHHHHHHF BHHHHHLHHF BHHHHHLLHF
024-027    BHHHHHLHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
028-031    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
032-035    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
036-039    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHLHHF
040-043    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
044-047    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
048-051    BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF
052-055    BHHHHHLHHF BHHHHHLHHF BHHHHHLLHF BHHHHHLLHF
056-059    BHHHHHLLHF BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF
060-063    BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF BHHHHHHHHF
064-067    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
068-071    BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF BHHHHHHLHF
072-075    BHHHHHHLHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
076-079    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
080-083    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
084-087    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF
088-091    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
092-095    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
096-099    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
100-103    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHLHHF
104-107    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
108-111    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
112-115    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
116-119    BHHHHHHHHF BHHHHHHLHF BHHHHHHHHF BHHHHHHHHF
120-123    BHHHHHHHHF BHHHHHHLHF BHHHHHHHHF BHHHHHHHHF
124-127    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
128-131    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
132-135    BHHHHHHHHF BHHHHHHLHF BHHHHHHHHF BHHHHHLHHF
136-139    BHHHHHLHHF BHHHHHLLHF BHHHHHLHHF BHHHHHLHHF
140-143    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
144-147    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
148-151    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
152-155    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
156-159    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
160-163    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
164-167    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHLLHF
168-171    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
172-175    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
176-179    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
180-183    BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF BHHHHHLLHF
184-187    BHHHHHLLHF BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF
188-191    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
192-195    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
196-199    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHLLHF
200-203    BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF BHHHHHLHHF
204-207    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
208-211    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
212-215    BHHHHHHHHF BHHHHHHHHF BHHHHHLHHF BHHHHHLHHF
216-219    BHHHHHLHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
220-223    BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF BHHHHHHHHF
224-227    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
228-231    BHHHHHHHHF BHHHHHHHHF BHHHHHLHHF BHHHHHLHHF
232-235    BHHHHHLHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
236-239    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
240-243    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
244-247    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF
248-251    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
252-255    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
256-259    BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
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260-263   BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF BHHHHHHLHF
264-267   BHHHHHHLHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
268-271   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
272-275   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
276-279   BHHHHHHHHF BHHHHHHHHF BHHHHHLLHF BHHHHHLLHF
280-283   BHHHHHLLHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
284-287   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
288-291   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
292-295   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHLHHF
296-299   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
300-303   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
304-307   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
308-311   BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF BHHHHHHLHF
312-315   BHHHHHHLHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
316-319   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
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328-331   BHHHHHHLHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF
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340-343   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHLHF
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504-507   BHHHHHHHHF BHHHHHHLHF BHHHHHHHHF BHHHHHHHHF
508-511   BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF BHHHHHHHHF E
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