

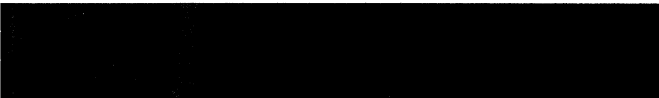


**3270 Information
Display System
Reference
Summary**

GX20-1878-3



3270 Information Display System Reference Summary



GX20-1878-3

This publication is intended for use by application programmers. It will be updated from time to time to reflect system changes. The user is cautioned, however, that the authoritative source of information for this booklet is the *IBM 3270 Information Display System Component Description (GA27-2749)*, which will be first to reflect changes.

Fourth Edition (October 1978)

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CONTROL CHARACTER I/O CODES

Bits 2-7	EBCDIC Hex	ASCII Hex	Graphic EBCDIC/ASCII
00 0000	40	20	SP
00 0001	C1	41	A
00 0010	C2	42	B
00 0011	C3	43	C
00 0100	C4	44	D
00 0101	C5	45	E
00 0110	C6	46	F
00 0111	C7	47	G
00 1000	C8	48	H
00 1001	C9	49	I
00 1010	4A	5B	¢ [
00 1011	4B	2E	·
00 1100	4C	3C	<
00 1101	4D	28	(
00 1110	4E	2B	+
00 1111	4F	21 ^[2]	| |or!
01 0000	50	26	&
01 0001	D1	4A	J
01 0010	D2	4B	K
01 0011	D3	4C	L
01 0100	D4	4D	M
01 0101	D5	4E	N
01 0110	D6	4F	O
01 0111	D7	50	P
01 1000	D8	51	Q
01 1001	D9	52	R
01 1010	5A	5D	!]
01 1011	5B	24	\$
01 1100	5C	2A	*
01 1101	5D	29)
01 1110	5E	3B	;
01 1111	5F	5E ^[2]	¬ ¬or^

1. The following characters are internally handled as 6-bit structured data: graphic, attribute, AID, WCC, CCC, CU and device address, buffer address, and status and sense (except by the 3274 and 3276 when operating in BSC). When any character is received by the CU, only the low-order 6 bits are used. When this character is transmitted to the program, the CU assigns the EBCD code. If transmission is in ASCII, the CU translates the EBCD code to ASCII before transmission.

• For example, to use this table to determine the hex code transmitted for an attribute character, first determine the values of bits 2-7. Select

Bits 2-7	EBCDIC Hex	ASCII Hex	Graphic EBCDIC/ASCII
10 0000	60	2D	—
10 0001	61	2F	/
10 0010	E2	53	S
10 0011	E3	54	T
10 0100	E4	55	U
10 0101	E5	56	V
10 0110	E6	57	W
10 0111	E7	58	X
10 1000	E8	59	Y
10 1001	E9	5A	Z
10 1010	6A ^[3]	7C	|
10 1011	6B	2C	,
10 1100	6C	25	%
10 1101	6D	5F	—
10 1110	6E	3E	>
10 1111	6F	3F	?
11 0000	F0	30	0
11 0001	F1	31	1
11 0010	F2	32	2
11 0011	F3	33	3
11 0100	F4	34	4
11 0101	F5	35	5
11 0110	F6	36	6
11 0111	F7	37	7
11 1000	F8	38	8
11 1001	F9	39	9
11 1010	7A	3A	:
11 1011	7B	23	#
11 1100	7C	40	@
11 1101	7D	27	'
11 1110	7E	3D	=
11 1111	7F	22	"

this bit configuration in the table under "Bits 2-7". The hex code that will be transmitted (either in EBCDIC or ASCII) is to the right of the bit configuration.

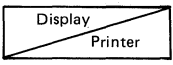
● Use this table also to determine equivalent EBCD and ASCII hex codes and their associated graphic characters.

2. See page 8, note 5.

3. The character is not displayed and is printed by the 3287 and 3288 only.

EBCDIC I/O INTERFACE CODE FOR 3271, 3272, AND 3275 UNITS AND ATTACHED 3277, 3284, 3286, 3287, AND 3288 TERMINALS

		00				01			
		00	01	10	11	00	01	10	11
		0	1	2	3	4	5	6	7
Hex 1	↓								
Bits 4567	↓								
0000	0	NUL	Note 7			SP	&		
0001	1	SOH	SBA						
0010	2	STX	EUA		SYN				
0011	3	ETX	IIC						
0100	4								
0101	5	PT	NL						
0110	6			ETB					
0111	7			ESC	EOT				
1000	8								
1001	9		EM						
1010	A					d	!	|	:
1011	B					.	\$,	#
1100	C	FF	DUP		RA	<	.	%	@
1101	D		SF	ENQ	NAK	()	-	'
1110	E		FM			+	;	>	=
1111	F		ITB		SUB	|	⌋	?	"



Notes:

- Character code assignments other than those shown within all outlined areas of this chart are undefined. If an undefined character code is programmed, the character that will be displayed or printed and the I/O interface code returned on a subsequent read operation are not specified. The character displayed or printed by these terminals for a given undefined character code may be different for other terminals. IBM reserves the right to change at any time the character displayed or printed and the I/O interface code returned for an undefined character code.
- Lowercase alphabetic characters (shown within the dotted outlined area) are converted to uppercase by the display station or printer and displayed or printed as uppercase characters, unless the terminal has Dual Case capability.
- When these codes are sent to a display or to a printer not under format control, the indicated graphic results.

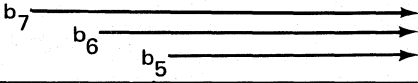
Hex Code		Function	Graphic
EBCDIC	ASCII		
00	00	NUL	Space
0C	0C	FF	Space or <
15	0A	NL	Space or 5
19	19	EM	Space or 9
1C	1C	DUP	*
1E	1E	FM	;

10				11				Bits
00	01	10	11	00	01	10	11	← 0,1
8	9	A	B	C	D	E	F	← 2,3
							Hex 0	
							0	
a	j			A	J		1	
b	k	s		B	K	S	2	
c	l	t		C	L	T	3	
d	m	u		D	M	U	4	
e	n	v		E	N	V	5	
f	o	w		F	O	W	6	
g	p	x		G	P	X	7	
h	q	y		H	Q	Y	8	
i	r	z		I	R	Z	9	

- Bit 0 is assigned and bit 1 is always a 1 for the following characters: attribute, write control (WCC), copy control (CCC), CU and device address, buffer address, sense, and status. Bit 0 is assigned so that each character can be represented by a graphic character within the solid outlined areas of the chart.
- The FF control character (hex 0C) is returned to the host during a subsequent read operation as 8C (hex).
- The character (hex 6A) is not displayed and is printed by the 3287 and 3288 only.
- This function (DLE) is determined by the character following.

Hex Code		Function
EBCDIC	ASCII	
1061	1031	ACK1
106B	103B	WACK
1070	1030	ACK0
107C	103C	RVI

**ASCII I/O INTERFACE CODE FOR 3271, 3272, AND 3275
UNITS AND ATTACHED 3277, 3284, 3286, 3287, AND
3288 TERMINALS**



b_4 ↓	b_3 ↓	b_2 ↓	b_1 ↓	Hex 0 → Hex 1 ↓
0	0	0	0	0
0	0	0	1	1
0	0	1	0	2
0	0	1	1	3
0	1	0	0	4
0	1	0	1	5
0	1	1	0	6
0	1	1	1	7
1	0	0	0	8
1	0	0	1	9
1	0	1	0	A
1	0	1	1	B
1	1	0	0	C
1	1	0	1	D
1	1	1	0	E
1	1	1	1	F

0	0	0	0	1	1	1	1
0	0	1	1	0	0	1	1
0	1	0	1	0	1	0	1
0	1	2	3	4	5	6	7
NUL	Note 7	SP	0	@	P		p
SOH	SBA	!	1	A	Q	a	q
STX	EUA	"	2	B	R	b	r
ETX	IC	#	3	C	S	c	s
EOT	RA	\$	4	D	T	d	t
ENQ	NAK	%	5	E	U	e	u
	SYN	&	6	F	V	f	v
	ETB	'	7	G	W	g	w
		(	8	H	X	h	x
PT	EM	)	9	I	Y	i	y
NL	SUB	.	:	J	Z	j	z
	ESC	+	;	K	[	k	
FF	DUP	,	<	L	\	l	
	SF	-	=	M	]	m	
	FM	.	>	N	^	n	
	ITB	/	?	O	-	o	

Display	Printer
---------	---------

Notes:

1. Character code assignments other than those shown within all outlined areas of this chart are undefined. If an undefined character code is programmed, the character that will be displayed or printed and the I/O interface code returned on a subsequent read operation are not specified. The character displayed or printed by these terminals for a given undefined character code may be different for other terminals. IBM reserves the right to change at any time the character displayed or printed and the I/O interface code returned for an undefined character code.
2. Lowercase alphabetic characters (shown within the dotted outlined area) are converted to uppercase by the display station or printer and displayed or printed as uppercase characters, unless the terminal has Dual Case capability.
3. When these codes are sent to a display or to a printer not under format control, the indicated graphic results.

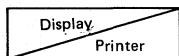
Hex Code		Function	Graphic
EBCDIC	ASCII		
00	00	NUL	Space
0C	0C	FF	Space or <
15	0A	NL	Space or 5
19	19	EM	Space or 9
1C	1C	DUP	*
1E	1E	FM	;

4. Attribute, write control (WCC), copy control (CCC), CU and device address, buffer address, sense, and status characters are assigned so that each character can be represented by a graphic character within the solid outlined portion of this chart.
5. ASCII A option displays and prints | and ⊐ for interface codes 21 and 5E (hex), respectively. ASCII B option displays and prints I and ^ for codes 21 and 5E (hex) respectively.
6. The FF control character (hex 0C) is returned to the host during a subsequent read operation as 46 (hex).
7. This function (DLE) is determined by the character following.

Hex Code		Function
EBCDIC	ASCII	
1061	1031	ACK1
106B	103B	WACK
1070	1030	ACK0
107C	103C	RVI

EBCDIC I/O INTERFACE CODE FOR THE 3274 CONTROL UNIT AND ATTACHED 3277, 3284, 3286, 3287, AND 3288 TERMINALS

Bits 4567		00				01			
		00	01	10	11	00	01	10	11
		0	1	2	3	4	5	6	7
0000	0	NUL	Note 3			SP	&	-	
0001	1	SOH	SBA					/	
0010	2	STX	EUA		SYN				
0011	3	ETX	IC						
0100	4	VCS	ENP	INP					
0101	5	PT HT	NL	LF	TRN				
0110	6		BS	ETB					
0111	7			ESC	EOT				
1000	8								
1001	9		EM					'	
1010	A					¢	!	|	:
1011	B	VT	Note 4			.	\$,	#
1100	C	FF	DUP	RA		<	.	%	@
1101	D	CR	SF	ENQ	NAK	()	-	'
1110	E		FM IRS			+	;	>	=
1111	F		ITB	BEL	SUB	|	⌋	?	"



= Stored as a 'lowercase' symbol. Displayed on Mono Case display only. Blank on Dual Case Display. Cannot be entered from keyboard.

Notes:

- Character code assignments other than those shown within all outlined areas of this chart are defined. If an undefined character code is programmed, the character that will be displayed or printed and the I/O interface code returned on a subsequent read operation are not specified. The character displayed or printed by these terminals for a given undefined character code may be different for other terminals. IBM reserves the right to change at any time the character displayed or printed and the I/O interface code returned for an undefined character code.
- When these codes are sent to a display or to a printer not under format control, the indicated graphic results (except the DUP and FM print as *). All other control characters are displayed as hyphens.

10				11				Bits 0,1
00	01	10	11	00	01	10	11	2,3
8	9	A	B	C	D	E	F	Hex 0
				(	)	|	0	
a	j	-		A	J		1	
b	k	s		B	K	S	2	
c	l	t		C	L	T	3	
d	m	u		D	M	U	4	
e	n	v		E	N	V	5	
f	o	w		F	O	W	6	
g	p	x		G	P	X	7	
h	q	y		H	Q	Y	8	
i	r	z		I	R	Z	9	

- This function (DLE) is determined by the character following.
- This function is determined by the character following.

Hex Code		Function	Graphic
EBCDIC	ASCII		
00	00	NUL	Space
0C	0C	FF	Space or <
0D	0D	CR	> Mono Case Space Dual Case
15	0A / 14	NL	Space or 5
19	19	EM	Space or 9
1C	1C	DUP	• Mono Case • Dual Case
1E	1E	FM	; Mono Case ; Dual Case
1061	1031	ACK1	
106B	103B	WACK	
1070	1030	ACK0	
107C	103C	RVI	
2BC1	-	SHF	
2BC2	-	SVF	
2BC6	-	SLD	

- The | characters at locations 6A and E0 (hex) are not displayed and are printed by the 3287 and 3288 in mono case mode only. They print as a space in dual case mode.

EBCDIC I/O INTERFACE CODE FOR 3274 AND 3276 UNITS AND ATTACHED 3278, 3287, AND 3289 TERMINALS

		00				01			
		00 0	01 1	10 2	11 3	00 4	01 5	10 6	11 7
0000	0	NUL	Note 3			SP	&	-	
0001	1	SOH	SBA					/	
0010	2	STX	EUA		SYN				
0011	3	ETX	IC						
0100	4	VCS	ENP	INP					
0101	5	PT HT	NL	LF	TRN				
0110	6		BS	ETB					
0111	7			ESC	EOT				
1000	8								
1001	9		EM						'
1010	A					¢	!	|	:
1011	B	VT		Note 4		.	\$,	#
1100	C	FF	DUP	RA		<	.	%	@
1101	D	CR	SF	ENQ	NAK	()	-	'
1110	E		FM IRS			+	;	>	=
1111	F		ITB	BEL	SUB	|	⌋	?	"

Display
Printer

Notes:

- Character code assignments other than those shown within all outlined areas of this chart are undefined. If an undefined character code is programmed, the character that will be displayed or printed is a hyphen (-); hex code 60 will be returned on a subsequent read operation. IBM reserves the right to change at any time the character displayed or printed and the I/O interface code returned for an undefined character code.
- When these codes are sent to a display or to a printer not under format control, the indicated graphic results (except the DUP and FM print as *). All other control characters are displayed as hyphens.
- This function (DLE) is determined by the character following \longrightarrow
- This function is determined by the character following \longrightarrow

10				11			
00	01	10	11	00	01	10	11
8	9	A	B	C	D	E	F
				(	)	\	0
a	j	~		A	J		1
b	k	s		B	K	S	2
c	l	t		C	L	T	3
d	m	u		D	M	U	4
e	n	v		E	N	V	5
f	o	w		F	O	W	6
g	p	x		G	P	X	7
h	q	y		H	Q	Y	8
i	r	z		I	R	Z	9

Bits
← 0,1
← 2,3
← Hex 0

Hex Code		Function	Graphic
EBCDIC	ASCII		
00	00	NUL	Space
0C	0C	FF	Space or <
0D	0D	CR	> Mono Case Space Dual Case
15	0A / 14	NL	Space or 5
19	19	EM	Space or 9
1C	1C	DUP	• Mono Case • Dual Case
1E	1E	FM	; Mono Case ; Dual Case
1061	1031	ACK1	
106B	103B	WACK	
1070	1030	ACK0	
107C	103C	RVI	
/ 2BC1	-	SHF	
/ 2BC2	-	SVF	
/ 2BC6	-	SLD	

ASCII I/O INTERFACE CODE FOR 3274 AND 3276 UNITS AND ATTACHED 3278, 3287, AND 3289 TERMINALS

Bits 4321	Hex 1	000	001	010	011	100	101	110	111
		0	1	2	3	4	5	6	7
0000	0	NUL	Note 4	SP	0	@	P		p
0001	1	SOH	SBA	|	1	A	Q	a	q
0010	2	STX	ENP	"	2	B	R	b	r
0011	3	ETX	EUA	#	3	C	S	c	s
0100	4	EOT	INP	\$	4	D	T	d	t
0101	5	ENQ	IC	%	5	E	U	e	u
0110	6		VCS	&	6	F	V	f	v
0111	7	BEL	RA	'	7	G	W	g	w
1000	8		NL	(	8	H	X	h	x
1001	9	BS	HT	)	9	I	Y	i	y
1010	A	PT	LF	*	:	J	Z	j	z
1011	B	NL	VT	+	;	K	[	k	}
1100	C	FF		'	<	L	\	l	|
1101	D	CR	SF	-	=	M	]	m	}
1110	E		FM	.	>	N	^	n	~
1111	F		ITB	/	?	O	-	o	

Display / Printer

Notes:

- Character code assignments other than those shown within all outlined areas of this chart are undefined. If an undefined character code is programmed, the character that will be displayed or printed is a hyphen (-); hex code 2D will be returned on a subsequent read operation. IBM reserves the right to change at any time the character displayed or printed and the I/O interface code returned for an undefined character code.
- Lowercase alphabetic characters (shown within the dotted outlined area) are converted to uppercase by the display station or printer and displayed or printed as uppercase characters, unless the terminal has Dual Case capability.
- When these codes are sent to a display or to a printer not under format control, the indicated graphic results (except the DUP and FM print as *). All other control characters are displayed as hyphens.

Hex Code		Function	Graphic
EBCDIC	ASCII		
00	00	NUL	Space
0C	0C	FF	Space or <
0D	0D	CR	> Mono Case Space Dual Case
15	0A / 14	NL	Space or 5
19	19	EM	Space or 9
1C	1C	DUP	* Mono Case ; Dual Case
1E	1E	FM	; Mono Case ; Dual Case
1061	1031	ACK1	
106B	103B	WACK	
1070	1030	ACK0	
107C	103C	RV1	

- This function (DLE) is determined by the character following.

BUFFER CONTROL ORDERS AND ORDER CODES

Order Sequence Order	Byte 1 (Order Code)		Byte 2	Byte 3	Byte 4
	EBCDIC (Hex)	ASCII (Hex)			
Start Field (SF)	1D	1D	Attribute Character		
Set Buffer Address (SBA)	11	11	1st Address Byte 1	2nd Address Byte 1	
Insert Cursor (IC)	13	13			
Program Tab (PT)	05	09			
Repeat to Address (RA)	3C	14	1st Address Byte 1	2nd Address Byte 1	Character to Be Repeated
Erase Unprotected to Address (EUA)	12	12	1st Address Byte 1	2nd Address Byte 1	

Note:

1. To be a valid address:
 - a. if the Erase/Write Alternate command is not used, the maximum address is 479 for 3276, 3277, and 3278 Model 1 displays or 1919 for 3277 Model 2, 3278 Models 2, 3, and 4, or 3276 Models 2, 3, 4, 11, 12, 13, and 14.
 - b. if the Erase/Write Alternate command is used, the alternate buffer size is specified by the model or bind parameter (959, 1919, 2559, or 3439).

ATTRIBUTE CHARACTER BIT DEFINITIONS

X	1	U/P	A/N	D/SPD	Reserved	MDT
---	---	-----	-----	-------	----------	-----

0 1 2 3 4 5 6 7

EBCD Bit	Field Description
0	Value determined by contents of bits 2-7.
1	Always a 1.
2	0 = Unprotected 1 = Protected
3	0 = Alphameric 1 = Numeric (causes automatic upshift of data entry keyboard) <i>Note:</i> Bits 2 and 3 equal to 11 causes an automatic skip.
4&5	00 = Display/not selector-pen detectable. 01 = Display/selector-pen detectable. 10 = Intensified display/selector-pen detectable. 11 = Nondisplay, nonprint, nondetectable.
6	Reserved. Must always be 0.
7	Modified Data Tag (MDT); identifies modified fields during Read Modified command operations. 0 = Field has not been modified. 1 = Field has been modified by the operator. Can also be set by program in data stream.

Note: Bits 0 and 1 are not decoded when received by the 3270. When transferring characters to the CPU, bit 1 is a 1 and bit 0 is set, depending upon the character being transferred. All attribute characters are part of the defined character set. The default option (bits 2 through 7 all set to 0) results in an unprotected, alphameric, displayed, nondetectable field.

ATTRIBUTE CHARACTER SUMMARY

ATTRIBUTE								Hex Code	
Prot	A/N	High Intens	Sel Pen Det	Non Disp PRT	MDT ON	Bits		EBCD	ASCII
						23	4567		
U						00	0000	40	20
U					Y	00	0001	C1	41
U			Y			00	0100	C4	44
U			Y		Y	00	0101	C5	45
U		H	Y			00	1000	C8	48
U		H	Y		Y	00	1001	C9	49
U		-	-	Y		00	1100	4C	3C
U		-	-	Y	Y	00	1101	4D	28
U	N					01	0000	50	26
U	N				Y	01	0001	D1	4A
U	N		Y			01	0100	D4	4D
U	N		Y		Y	01	0101	D5	4E
U	N	H	Y			01	1000	D8	51
U	N	H	Y		Y	01	1001	D9	52
U	N	-	-	Y		01	1100	5C	2A
U	N	-	-	Y	Y	01	1101	5D	29
P						10	0000	60	2D
P					Y	10	0001	61	2F
P			Y			10	0100	E4	55
P			Y		Y	10	0101	E5	56
P		H	Y			10	1000	E8	59
P		H	Y		Y	10	1001	E9	5A
P		-	-	Y		10	1100	6C	25
P		-	-	Y	Y	10	1101	6D	5F
P	S					11	0000	F0	30
P	S				Y	11	0001	F1	31
P	S		Y			11	0100	F4	34
P	S		Y		Y	11	0101	F5	35
P	S	H	Y			11	1000	F8	38
P	S	H	Y		Y	11	1001	F9	39
P	S	-	-	Y		11	1100	7C	40
P	S	-	-	Y	Y	11	1101	7D	27

H = High P = Protected U = Unprotected
 N = Numeric S = Automatic skip Y = Yes

ATTENTION IDENTIFICATION (AID) VALUES

FOR READ MODIFIED OPERATION

AID	Hex Character (EBCDIC)	Hex Character (ASCII)	Graphic Character	Read Modified Command Operation	Resultant Transfer to CPU
No AID generated (Display or Display Station)	60	2D	—	Rd Mod (Unsolicited Read or Read Modified from Host)	If performing a remote polling operation, no read operation occurs; otherwise, field addresses and text in the modified fields are transferred.
No AID generated (Printer)	E8	59	Y	Rd Mod	
ENTER key and & (Selector Pen Attention)	7D	27	'	Rd Mod	AID code and cursor address, followed by an SBA order, attribute address +1, and text for each modified field. Nulls are suppressed.
PF 1 key	F1	31	1	Rd Mod	
PF 2 key	F2	32	2	Rd Mod	
PF 3 key	F3	33	3	Rd Mod	
PF 4 key	F4	34	4	Rd Mod	
PF 5 key	F5	35	5	Rd Mod	
PF 6 key	F6	36	6	Rd Mod	
PF 7 key	F7	37	7	Rd Mod	
PF 8 key	F8	38	8	Rd Mod	
PF 9 key	F9	39	9	Rd Mod	
PF 10 key	7A	3A	:	Rd Mod	
PF 11 key	7B	23	#	Rd Mod	
PF 12 key	7C	40	@	Rd Mod	
PF 13 key	C1	41	A	Rd Mod	
PF 14 key	C2	42	B	Rd Mod	
PF 15 key	C3	43	C	Rd Mod	
PF 16 key	C4	44	D	Rd Mod	
PF 17 key	C5	45	E	Rd Mod	
PF 18 key	C6	46	F	Rd Mod	
PF 19 key	C7	47	G	Rd Mod	
PF 20 key	C8	48	H	Rd Mod	
PF 21 key	C9	49	I	Rd Mod	
PF 22 key	4A	5B	€	Rd Mod	
PF 23 key	4B	2E	—	Rd Mod	
PF 24 key	4C	3C	<	Rd Mod	
Card Reader	E6	57	W	Rd Mod	
Selector Pen Attention space null	7E	3D	=	Rd Mod	AID code, cursor address, and field addresses only; no data.

FOR SHORT READ OPERATION

PA 1 key	6C	25	%	Short Rd	AID code only.
PA 2 (CNCL) key	6E	3E	>	Short Rd	
PA 3 key	6B	2C	'	Short Rd	
CLEAR key	6D	5F	—	Short Rd	

FOR TEST REQUEST READ OPERATION

TEST REQ and SYS REQ keys	F0	30	0	Test Req Rd	A test request message. AID transferred on Read Buffer only.
---------------------------	----	----	---	-------------	--

REMOTE CONTROL UNIT & DEVICE ADDRESSING
FOR BINARY SYNCHRONOUS ATTACHMENT

Device or Control Unit No.	Addresses for: DEVICE SELECTION CU POLL FIXED RETURN			Addresses for: CU SELECTION TEST REQUEST		
	Char.	EBCDIC Hex	ASCII Hex	Char.	EBCDIC Hex	ASCII Hex
0	SP ^[1]	40	20	-	60	2D
1	A	C1	41	/	61	2F
2	B	C2	42	S	E2	53
3	C	C3	43	T	E3	54
4	D	C4	44	U	E4	55
5	E	C5	45	V	E5	56
6	F	C6	46	W	E6	57
7	G	C7	47	X	E7	58
8	H	C8	48	Y	E8	59
9	I	C9	49	Z	E9	5A
10	∅	4A		|	6A	
	[		5B			7C
11	.	4B	2E	,	6B	2C
12	<	4C	3C	%	6C	25
13	(	4D	28	_	6D	5F
14	+	4E	2B	>	6E	3E
15	|	4F		?	6F	3F
	| or !		21			
16	&	50	26	0	F0	30
17	J	D1	4A	1	F1	31
18	K	D2	4B	2	F2	32
19	L	D3	4C	3	F3	33
20	M	D4	4D	4	F4	34
21	N	D5	4E	5	F5	35
22	O	D6	4F	6	F6	36
23	P	D7	50	7	F7	37
24	Q	D8	51	8	F8	38
25	R	D9	52	9	F9	39
26	!	5A		:	7A	3A
	]		5D			
27	\$	5B	24	#	7B	23
28	*	5C	2A	@	7C	40
29	)	5D	29	'	7D	27
30	;	5E	3B	=	7E	3D
31	¬	5F		" ^[2]	7F	22
	¬ or ^		5E			

1. Device address for a 3275.
2. Device address for a General Poll operation.

DEVICE ADDRESSING for 3272/3274 Model 1B
Sixteen or Fewer Devices per Control Unit

Control Unit No.	8-bit Local Address Byte		Device No.	4 5 6 7 (XXXX)
	Control Unit	Device		
	0 1 2 3	4 5 6 7		
0	0000	XXXX	0	0000
1	0001	XXXX	1	0001
2	0010	XXXX	2	0010
3	0011	XXXX	3	0011
4	0100	XXXX	4	0100
5	0101	XXXX	5	0101
6	0110	XXXX	6	0110
7	0111	XXXX	7	0111
8	1000	XXXX	8	1000
9	1001	XXXX	9	1001
10	1010	XXXX	10	1010
11	1011	XXXX	11	1011
12	1100	XXXX	12	1100
13	1101	XXXX	13	1101
14	1110	XXXX	14	1110
15	1111	XXXX	15	1111

DEVICE ADDRESSING for 3272/3274 Model 1B
Seventeen or More Devices per Control Unit

Control Unit No.	8-bit Local Address Byte		Device No.	3 4 5 6 7 (XXXXX)	Device No.	3 4 5 6 7 (XXXXX)
	Control Unit	Device				
	0 1 2	3 4 5 6 7				
0	000	XXXXX	0	00000	16	10000
2	001	XXXXX	1	00001	17	10001
4	010	XXXXX	2	00010	18	10010
6	011	XXXXX	3	00011	19	10011
8	100	XXXXX	4	00100	20	10100
10	101	XXXXX	5	00101	21	10101
12	110	XXXXX	6	00110	22	10110
14	111	XXXXX	7	00111	23	10111
			8	01000	24	11000
			9	01001	25	11001
			10	01010	26	11010
			11	01011	27	11011
			12	01100	28	11100
			13	01101	29	11101
			14	01110	30	11110
			15	01111	31	11111

Note: Control Unit Nos. 1, 3, 5, 7, 9, 11, 13, and 15 cannot be assigned when attached devices are assigned Device No. 16 or greater.

**DEVICE ADDRESSING for 3271 Control
Unit, Models 11 and 12**

Device Number	TH Address Field							
	Bits:	1	2	3	4	5	6	7
0		1	0	0	0	0	0	0
1		1	0	0	0	0	0	1
2		1	0	0	0	0	1	0
3		1	0	0	0	0	1	1
4		1	0	0	0	1	0	0
5		1	0	0	0	1	0	1
6		1	0	0	0	1	1	0
7		1	0	0	0	1	1	1
8		1	0	0	1	0	0	0
9		1	0	0	1	0	0	1
10		1	0	0	1	0	1	0
11		1	0	0	1	0	1	1
12		1	0	0	1	1	0	0
13		1	0	0	1	1	0	1
14		1	0	0	1	1	1	0
15		1	0	0	1	1	1	1
16		1	0	1	0	0	0	0
17		1	0	1	0	0	0	1
18		1	0	1	0	0	1	0
19		1	0	1	0	0	1	1
20		1	0	1	0	1	0	0
21		1	0	1	0	1	0	1
22		1	0	1	0	1	1	0
23		1	0	1	0	1	1	1
24		1	0	1	1	0	0	0
25		1	0	1	1	0	0	1
26		1	0	1	1	0	1	0
27		1	0	1	1	0	1	1
28		1	0	1	1	1	0	0
29		1	0	1	1	1	0	1
30		1	0	1	1	1	1	0
31		1	0	1	1	1	1	1

WRITE CONTROL CHARACTER (WCC)

X	1	Printout Format	Start Print	Sound Alarm	Kbd Restore	Reset MDT Bits	
0	1	2	3	4	5	6	7

Bit	Explanation
0	Determined by the contents of bits 2-7.
1	Reserved.
2,3	Define the printout format, as follows: = 00 – The NL, EM, and CR* orders in the data stream determine print line length. Provides a 132-print position line when the orders are not present. = 01 – Specifies 40-character print line. = 10 – Specifies 64-character print line. = 11 – Specifies 80-character print line.
4	Start Printer bit. When set to 1, initiates a printout operation at completion of the write operation.
5	The Sound Alarm bit. When set to 1, sounds the audible alarm at the selected device at the end of the operation if that device has an audible alarm.
6	The Keyboard Restore bit. When set to 1, restores operation of the keyboard by resetting the INPUT INHIBITED indicator on 3275 and 3277 displays, and the System Lock or Wait symbol on 3276 and 3278 displays. It also resets the AID byte at the termination of the I/O command.
7	Reset MDT bits. When set to 1, all MDT bits in the selected devices' existing buffer data are reset before any data is written or orders are executed.

*The CR order is applicable to the 3287 and 3289 Printers only.

LOCAL AND REMOTE COMMAND CODES

COMMAND	3272	3271	3275	
	3274-1B	3274	3276	
	EBCDIC Hex	EBCDIC Hex	ASCII Hex	Graphic
Copy ¹	N/A	F7	37	7
Erase All Unprotected	0F	6F	3F	?
Erase/Write	05	F5	35	5
Erase/Write Alternate ²	0D	7E	3D	=
Read Buffer	02	F2	32	2
Read Modified	06	F6	36	6
Read Modified All ³	N/A	6E	3E	:
Write	01	F1	31	1
No Operation	03	N/A	N/A	N/A
Select	0B	N/A	N/A	N/A
Sense	04	N/A	N/A	N/A

Notes:

1. Applicable to 3271, 3274-1C (BSC), and 3276-1/4 only.
2. Applicable to 3274 and 3276 only.
3. Applicable to 3274-1A, 3274-1C (SNA/SDLC), and 3276-11/14 only.

COPY CONTROL CHARACTER (CCC)

*	1	Printout Format	Start Print	Sound Alarm	Type of Data to be Copied		
0	1	2	3	4	5	6	7

*Determined by the configuration of bits 2-7.

(The CCC is not used by the 3272, 3275, or SNA 3274/3276).

Bit	Explanation
0	Determined by the contents of bits 2-7.
1	Reserved.
2,3	Define the printout format as follows: = 00 — The NL, EM, and CR* orders in the data stream determine print line length. Provides a 132-print position line when the orders are not present. = 01 — Specifies a 40-character print line. = 10 — Specifies a 64-character print line. = 11 — Specifies an 80-character print line.
4	The Start Printer bit. When set to 1, initiates a print-out operation at the "to" device after buffer transfers are completed.
5	The Sound Alarm bit. When set to 1, sounds the audible alarm at the "to" device after buffer transfers are completed if that device has an audible alarm.
6,7	Define the type of data to be copied as follows: = 00 — Only attribute characters are copied. = 01 — Attribute characters and unprotected alphanumeric fields (including nulls) are copied. Nulls are transferred for the alphanumeric characters not copied from the protected fields. = 10 — All attribute characters and protected alphanumeric fields (including nulls) are copied. Nulls are transferred for the alphanumeric characters not copied from the unprotected fields. = 11 — The entire contents of the storage buffer (including nulls) are copied.

*The CR order is applicable to the 3287 (3274/3276 Attachment) and 3289 Printers only.

PRINTER CONTROL ORDERS FOR 3270 DATA STREAM

ORDER	EBCDIC	ASCII
New Line (NL)	hex 15	hex 0A
End of Message (EM)	hex 19	hex 19
FORMS FEED ^(1,2) , (FF)	hex 0C	hex 0C
SUPPRESS INDEX ⁽³⁾ , (SI)	hex BF	
CARRIAGE RETURN ⁽⁴⁾ , (CR)	hex OD	

1. Inserted either as the first character after the WCC in a WRITE, ERASE/WRITE, or ERASE WRITE ALTERNATE command stream, after a valid NL order, or after the last printable character position of any line for 3287, 3288, and 3289 Printers.

2. If a 3288 buffer is read back by the program, the FF characters are returned to the program as 8C (EBCDIC) or 46 (ASCII).

3. Honored only by the 3288 Printer equipped with the Text Print special feature.

4. Valid only in a data stream written to a 3287 with 3274/3276 Attachment and 3289 Printers.

SNA CHARACTER STRING (SCS) CONTROL CODES

Code	EBCDIC (hex)	Name
BS	16	Back Space
BEL	2F	Bell Function
CR	0D	Carriage Return
ENP	14	Enable Presentation
FF	0C	Forms Feed
HT	05	Horizontal Tab
INP	24	Inhibit Presentation
IRS	1E	Interchange-Record Separator
LF	25	Line Feed
NL	15	New Line
SHF	2BC1	Set Horizontal Format
SLD	2BC6	Set Line Density
SVF	2BC2	Set Vertical Format
TRN	35	Transparent
VCS	04	Vertical Channel Select
VT	0B	Vertical Tab

Note:

SCS control codes are honored by the 3287 and 3289 Printers when operating as LU type 1 attached to the 3274 or 3276.

BIND COMMAND SESSION PARAMETERS FOR THE 3274/3276

<u>Byte</u>	<u>Hex Value</u>	<u>Bit Setting</u>	<u>Meaning</u>
0	31		Identifies this RU as a Bind command.
1	01		Bind type and format. The only Bind type supported is Hex 01.
2	03		Function management (FM) profile. Specifies that the data flow control commands and the request/response protocols that are to be used for this session conform to FM Profile 3.
3	03		Transmission services (TS) profile. Specifies that the 3274 or 3276 conforms to TS Profile 3, that is, pacing and sequence numbers are used with normal flow transmission and that data traffic is controlled by the Clear and Start Data Traffic commands.
4			Primary LU Protocols.
		X	Chaining use: <ul style="list-style-type: none"> 0 The PLU can send only single-element chains. 1 The PLU can send single- or multiple-element chains.
		. X	Request mode selection: <ul style="list-style-type: none"> 0 Immediate request mode is used. Only one definite response can be outstanding at a time. That response must be received before the PLU can send another RU.
		. . XX	Chaining responses: <ul style="list-style-type: none"> 01 The PLU can only request exception-only responses. 10 The PLU can only request definite responses. 11 The PLU can request definite or exception-only responses.
		. . . . . 00 . .	Reserved.

BIND COMMAND SESSION PARAMETERS FOR THE 3274/3276 (cont'd)

<u>Byte</u>	<u>Hex Value</u>	<u>Bit Setting</u>	<u>Meaning</u>
		. . . . .X.	Compression indicator: 0 The PLU cannot send compressed data.
		. . . . .X	Send End Bracket Indicator (EB): 1 The PLU can send the EB.
5			Secondary LU Protocols.
		X	Chaining Use: 1 The 3274 or 3276 can send single- or multiple-element chains.
		.X	Request mode selection: 0 Immediate request mode is used. The 3274 or 3276 can issue a request for a single definite response. No further transmissions are sent until the 3274 or 3276 receives the requested response.
		. . XX	Chaining responses: 01 The 3274 or 3276 can only request exception-only responses. 10 The 3274 or 3276 can only request definite responses. 11 The 3274 or 3276 can request either definite or exception-only responses. If both are allowed, the 3274 or 3276 will request exception-only responses.
		. . . . . 00 . .	Reserved.
		. . . . . X .	Compression indicator: 0 The 3274 or 3276 cannot send compressed data.
		. . . . . X	Send End Bracket indicator (EB): 0 The 3274 or 3276 cannot send the EB.
6			Common Protocols.
		0	Reserved.

BIND COMMAND SESSION PARAMETERS FOR THE 3274/3276 (cont'd)

<u>Byte</u>	<u>Hex Value</u>	<u>Bit Setting</u>	<u>Meaning</u>
		. X	Function management (FM) header usage: 0 The PLU and the 3274 or 3276 cannot exchange FM headers.
		. . X	Brackets usage: 1 Bracketed session is used. Both the PLU and the 3274 or 3276 must use bracket protocols.
		. . . X	Bracket termination protocol: 1 Bracket termination rule 1 is used (refer to "Bracket Protocol" for a description of bracket termination rule 1).
		. . . . X	Alternate Code selection: 0 Both the PLU and the 3274 or 3276 must use EBCDIC. 1 Both the host program and the 3274 or 3276 can use an alternate code. An example of an alternate code is ASCII.
7		. . . . . 000	Reserved. Common Protocols.
		XX	Normal Flow Send/receive mode (selection): 10 This session uses half-duplex, flip-flop (HDX FF) transmissions. Refer to "Session Processing States."
		. . X	Recovery responsibility: 0 The PLU is responsible for error recovery.
		. . . X	Brackets first speaker: 0 The 3274 or 3276 is always the first speaker.
		. . . . . 000 .	Reserved.

BIND COMMAND SESSION PARAMETERS FOR THE 3274/3276 (cont'd)

<u>Byte</u>	<u>Hex Value</u>	<u>Bit Setting</u>	<u>Meaning</u>								
	 X	Contention resolution: 0 Contention (simultaneous transmissions from the host program and the 3274 or 3276) is resolved in favor of the 3274 or 3276. Presentation Services.								
8		00xx xxxx	Secondary-to-primary LU pacing count. This parameter is supported by the 3276 but not by the 3274. If set to zeros, pacing is not used.								
9		00xx xxxx	The primary-to-secondary pacing value defines the number of RUs that may be received by the 3274 or 3276 before a pacing response must be returned to indicate readiness for another block of RUs. If set to zeros, pacing is not used. See "Pacing" for recommendations of pacing values.								
10	XX		Maximum RU size sent by the secondary LU. This value represents the largest RU that can be sent by the 3274 or 3276. It is expressed as a mantissa (8 through F) and an exponent value of 2 by which the mantissa is multiplied. For example, when the mantissa is specified as 8 and the exponent of 2 is 5 (hex 85), the RU size represented is 256 bytes. Examples of mantissa and exponent values used by the 3274 or 3276 are shown below with the RU size they represent: <table style="margin-left: 40px;"> <tr> <td>85=256</td> <td>86=512</td> </tr> <tr> <td>C6=768</td> <td>87=1024</td> </tr> <tr> <td>A7=1280</td> <td>C7=1536</td> </tr> <tr> <td>E7=1792</td> <td>88=2048</td> </tr> </table>	85=256	86=512	C6=768	87=1024	A7=1280	C7=1536	E7=1792	88=2048
85=256	86=512										
C6=768	87=1024										
A7=1280	C7=1536										
E7=1792	88=2048										

BIND COMMAND SESSION PARAMETERS FOR THE 3274/3276 (cont'd)

<u>Byte</u>	<u>Hex Value</u>	<u>Bit Setting</u>	<u>Meaning</u>
11	XX		Maximum RU size sent by the primary LU. This value represents the largest RU that can be sent by the PLU and is specified in the same format as for the secondary LU (byte 10). See "RU Lengths Supported" for detailed information about values supported by 3274 and 3276.
12, 13	0000		Reserved; must be set to hexadecimal zeros.
For SLU Type 1:			
14	01		Type 1 print function using SCS data stream.
15-17	00		Reserved.
18	E1		Sent but not checked by the 3274 or 3276 for LU type 1.
19	00		Reserved.
20-24			Not supported for LU type 1.
For SLU Types 2 and 3:			
14	02		Type 2 3270 data stream compatibility mode.
14	03		Type 3 3270 print function using 3270 data stream.
15-19	00		Reserved.
20-24	XX		Refer to Figure 3-4 for LU type 2. Refer to Figure 3-5 for LU type 3.
For all SLU Types:			
25+			Reserved.

**SUMMARY OF SNA COMMANDS RECEIVED
FOR SNA 3274/3276**

SNA Command Received	SSCP-PU Session Active	SSCP-LU Session Active	LU-LU Session Active	LU-LU Session Processing States			
				Data Traffic Reset		In Bracket	
				On	Off	On	Off
ACTLU	R	E	T				
ACTPU	E	T	T				
DACTLU	R	T	T				
DACTPU	R,T	T	T				
BIND			E,I	X			X
UNBIND			R,T				
CANCEL			R		R		
CHASE			R		R	R	
CLEAR			R	X			X
SDT			R	R	X		
SIGNAL			R		R		
SHUTDOWN			R		R		
FM DATA			R		R	R	

Legend:

- R - Required state for this command to be valid.
- I - Command invalid if in this processing state.
- E - Command establishes this session.
- T - Command terminates this session.
- X - Command sets the processing state to the indicated status.

**SUMMARY OF SNA COMMANDS SENT
FOR SNA 3274/3276**

SNA Command Sent	SSCP-PU Session Active	SSCP-LU Session Active	LU-LU Session Active	LU-LU Session Processing States			
				Data Traffic Reset		In Bracket	
				On	Off	On	Off
LUSTAT			R		R		
SIGNAL			R		R		
CANCEL			R		R	R	
READY TO REC.			R		R		R
SHUT- DOWN COMPLETE			R		R		R
FM DATA			R		R	R	

Legend:

R — Required state for this command to be valid.

BRACKET STATE ERRORS FOR SNA 3274 AND 3276

Command State	CHASE &EB	CHASE &TEB	BID	CANCEL &EB	CANCEL &TEB	FMD &BB	FMD &TEB
BETB	2003	—	—	2003	—	—	2003
INB	—	—	0813	—	—	0813	—
PEND.BB	2003	—	—	2003	—	—	2003

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STATUS INDICATOR CODES FOR 3274

Error Code	Indicator	Probable Cause
202 (Type A Term.)	— Mach Chk	Internal terminal error.
203 (Feature)	— Mach Chk	Terminal feature circuitry failure.
204 (Type A Term.)	— Mach Chk	Terminal buffer parity error.
205 (Feature)	— Mach Chk	An operation was attempted on an inoperative or unsupported terminal feature.
206 (Feature)	— Mach Chk	Feature did not initialize properly.
207 (Type A Term.)	— Mach Chk	The terminal failed to respond to the CU.
208 (Type A Term.)	— Mach Chk	Invalid terminal response to CU.
209 (Type A Adapt) (Type A Term.)	— Mach Chk	CU-to-terminal communication failure.
210 (Feature)	— Mach Chk	Keyboard type is not supported.
211 (Type A Term.)	— Mach Chk	Invalid terminal response to CU.
212 (Kybd)	— Mach Chk	An invalid keystroke code was received from this display.
222 (Feature)	— Mach Chk	Selector pen error.
224 (Feature)	— Mach Chk	Magnetic slot reader error.
231 (Prntr)	— Mach Chk	An unrecoverable printer error has occurred.
270, 271, 273 (Type B Adapt)	1010 —	An unrecoverable terminal error has occurred.
272 (Type B Adapt)	1010 —	Terminal request was not serviced by the CU.

Effect	Recovery
Affected terminal is disabled. Set sense: Non-SNA: DC/US SNA: 081C	At the affected terminal, switch the Normal/Test switch from Normal to Test and back again (or switch power off, then on).
	Press RESET key and retry the operation.
CU clears the terminal buffer and sets sense: Non-SNA: DC/US SNA: 082B If internal recovery is unsuccessful, terminal is disabled. Set sense: Non-SNA: DC/US SNA: 081C	Host recovery. If host recovery is unsuccessful, switch Normal/Test switch from Normal to Test and back again (or switch power off, then on).
Feature cannot be used; remainder of the terminal is not affected.	Press RESET key and retry the operation. (Verify that the customization procedure specified that the failing was attached to the terminal.)
All terminal features are disabled. Basic terminal functions remain operative.	Press RESET key and retry the operation.
Affected terminal is disabled. Set sense: Non-SNA: DC/US SNA: 081C	At the affected terminal, switch the Normal/Test switch from Normal to Test and back again (or switch power off, then on).
	Press RESET key and retry the operation.
Affected terminal is disabled. Set sense: Non-SNA: DC/US SNA: 081C	At the affected terminal, switch the Normal/Test switch from Normal to Test and back again (or switch power off, then on).
Unpredictable keyboard operations.	Verify that the customization procedure specified that this keyboard type was attached to the subsystem.
Keyboard is locked if affected terminal is a display.	Press RESET key and retry the operation.
Keyboard is locked.	
The affected printer is disabled. Set sense: Non-SNA: EC/IR/US SNA: 081C	See the printer Problem Determination Guide.
All Type B terminals are disabled; Type A terminals are not affected.	Re-IML; perform host recovery if required
Set sense: Non-SNA: DC/US SNA: 082B	Host recovery.

Error Code	Indicator	Probable Cause
274 (Type B Term.)	— —	A terminal busy condition does not clear.
275 (Prntr)	— —	The affected printer indicates equipment check and not ready condition.
276 (Prntr)	— —	The affected printer indicates equipment check.
277 (Type B Term.)	— —	A terminal buffer parity error has occurred.
278 (Type B Adapt) (Type B Term.)	— —	A CU-to-terminal communication problem.
279 (Type B Term.)	— —	Internal terminal error.
292, 294, 295, 296, 299 (Type A Adapt)	1000 Mach Chk	Adapter failure.
293 (Type A Adapt)	1000 Mach Chk	The CU has received input from a terminal port that is not in the configuration table.
297 (Type A Adapt)	1000 Mach Chk	Adapter failure or unisolated terminal failure.
298 (Type A Adapt)	1000 Mach Chk	Adapter failure.
310, 311 (Mdl 1C-BSC)	1001 Mach Chk	A host communication adapter failure has occurred.
320, 321, 330, 331 (Mdl 1C-SDLC)	1001 Mach Chk	
340, 341, 342 (Mdl 1A)	1001 Mach Chk	
350, 351, 352, 353, 357 (Mdl 1B)	1001 Mach Chk	
354 (Mdl 1B)	1001 Mach Chk	
		The number of terminals specified during customization exceeds the number specified in the adapter address jumpers.

Effect	Recovery
Affected terminal is disabled. Set sense: Non-SNA: DC/US SNA: 081C	At the affected terminal, switch the Normal/Test switch from Normal to Test and back again (or switch power off, then on.)
Set sense: Non-SNA: EC/IR/US SNA: 081C	Operator recovery; follow locally established procedures.
Set sense: Non-SNA: EC/US SNA: 082B	Host recovery.
Set sense: Non-SNA: DC/US SNA: 082B If internal recovery is unsuccessful, terminal is disabled; set sense: Non-SNA: DC/US SNA: 081C	Host recovery. If host recovery is unsuccessful, switch Normal/Test Sw from Normal to Test and back again (or switch power off, then on).
Affected terminal is disabled if second attempt by CU is unsuccessful, and sense is set: Non-SNA: DC/US SNA: 081C	At the affected terminal, switch the Normal/Test switch from Normal to Test and back again (or switch power off, then on).
Affected terminal is disabled. Set sense: Non-SNA: DC/US SNA: 081C	
Display error indicator on all 3278s.	Press RESET key and retry the operation.
	Press RESET key and retry the operation. (Verify that the number of Type A terminals attached agrees with the number specified during the customization procedure.)
	Press RESET key and retry the operation.
Display error indicator on all 3278s. Disable the terminal that was communicating with the CU when the failure occurred.	At the affected terminal, switch the Normal/Test switch from Normal to Test and back again (or switch power off, then on). Press RESET key and retry the operation.
Host communication is disabled.	Re-IML; perform host recovery if required.
	Verify that the number of terminals specified during customization does not exceed the number of addresses jumpered on the adapter.

Error Code	Indicator	Probable Cause
355 (Mdl 1B)	1001 Mach Chk	A host communication adapter failure has occurred.
356 (Mdl 1B)	1001 Mach Chk	
381 (Type A Adapt) (Type B Adapt) (Kybd) (Feature) (Prntr) (Disp) (SNA) (Mdl 1A) (Mdl 1B) (Mdl 1C-BSC) (Mdl 1C-SDLC) (Type A Term.) (Type B Term.)	0010 Mach Chk	CU logic error.
390 (Type A Adapt) (Type B Adapt) (Kybd) (Feature) (Prntr) (Disp) (SNA) (Mdl 1A) (Mdl 1B) (Mdl 1C-BSC) (Mdl 1C-SDLC) (Type A Term.) (Type B Term.)	0001 or 0011-0111 Mach Chk	A storage parity error has occurred.
391 (Type A Adapt) (Type B Adapt) (Kybd) (Feature) (Prntr) (Disp) (SNA) (Mdl 1A) (Mdl 1B) (Mdl 1C-BSC) (Mdl 1C-SDLC) (Type A Term.) (Type B Term.)	0010 or 1101 Mach Chk	CU logic failure.
401 (Type A Adapt) (Type B Adapt) (Kybd) (Feature) (Prntr) (Disp) (SNA) (Mdl 1A) (Mdl 1B) (Mdl 1C-BSC) (Mdl 1C-SDLC) (Type A Term.) (Type B Term.)	— Prog Chk	Invalid command received.

Effect	Recovery
Display error indicator on the selected 3278. Set sense: DC	Host recovery.
Host communication is disabled. Set sense: DC	RE-IML; perform host recovery if required.
Host communication is disabled.	
Host communication is disabled.	RE-IML; perform host recovery if required.
Display error indicator on affected 3278. Set sense: Non-SNA: CR SNA: 1003	Press RESET key to reset the program check indicator and retry the operation. Call host-support programmer if the problem persists, since it is probably a data stream error.

Error Code	Indicator	Probable Cause
402 (Type A Adapt) (Type B Adapt) (Kybd) (Feature) (Prntr) (Disp) (SNA) (Mdl 1A) (Mdl 1B) (Mdl 1C-BSC) (Mdl 1C-SDLC) (Type A Term.) (Type B Term.)	— Prog Chk	Invalid (out of range) address has been received.
403 (Type A Adapt) (Type B Adapt) (Kybd) (Feature) (Prntr) (Disp) (SNA) (Mdl 1A) (Mdl 1B) (Mdl 1C-BSC) (Mdl 1C-SDLC) (Type A Term.) (Type B Term.)	— Prog Chk	Data stream containing data following a Rd, Rd Mod, or EAU command was received.
404 (Type A Adapt) (Type B Adapt) (Kybd) (Feature) (Prntr) (Disp) (SNA) (Mdl 1A) (Mdl 1B) (Mdl 1C-BSC) (Mdl 1C-SDLC) (Type A Term.) (Type B Term.)	— Prog Chk	Data stream containing SBA, RA, EUA, or SF order with invalid parameters was received.
405 (Mdl 1C-BSC)	— Prog Chk	Invalid Copy command was received.
406 (Mdl 1C-BSC)	— Prog Chk	Invalid command sequence received.
407 (Mdl 1B)	— Prog Chk	Valid command or order received that cannot be executed because: <ol style="list-style-type: none"> a. SBA, RA, or EUA order specifies an invalid address, or b. Write data stream ends before all required bytes of SBA, RA, EUA, or SF order sequence are received, or c. Write, E/W, EWA with Start Print bit set in WCC is chained to the next command; the print operation is suppressed.
408 (Mdl 1C-BSC)	— Prog Chk	Line buffer overflow.

Effect	Recovery
Display error indicator on affected 3278. Set sense: ☛ Non-SNA: OC SNA: 1005	Press RESET key to reset the program check indicator and retry the operation. Call host-support programmer if the problem persists, since it is probably a data stream error.
Display error indicator on affected 3278. Set sense: Non-SNA: OC SNA: 1003	
Display error indicator on affected 3278. Set sense: Non-SNA: OC SNA: 1005	
Display error indicator on affected 3278. Set sense: OC	

Error Code	Indicator	Probable Cause
410 (Mdl 1A)	— Prog Chk	RU greater than 1536 bytes received.
411 (SNA)	— Prog Chk	LU1 RU received with greater length than in Bind specification.
413 (SNA)	— Prog Chk	The attempted function is not supported.
420 (SNA)	— Prog Chk	LIC carried exception response when Bind specified definite response.
421 (SNA)	— Prog Chk	LIC carried definite response when Bind specified exception response.
421 (SNA)	— Prog Chk	LIC carried definite response when Bind specified exception response.
422 (SNA)	— Prog Chk	No Response is not allowed.
423 (SNA)	— Prog Chk	Format indicator (FI) bit is not allowed.
430 (SNA)	— Prog Chk	Sequence number error.
431 (SNA)	— Prog Chk	Chaining error.
432 (SNA)	— Prog Chk	Bracket error.
433 (SNA)	— Prog Chk	Data Traffic Reset.
434 (SNA)	— Prog Chk	Direction error.
440 (SNA)	— Prog Chk	Session Limit exceeded
441 (SNA)	— Prog Chk	Bracket Bid Reject (No RTR).
441 (SNA)	— Prog Chk	Receiver in Transmit Mode.
442 (SNA)	— Prog Chk	Request not executable.
443 (SNA)	— Prog Chk	Change Direction required.
444 (SNA)	— —	Session already Bound.

Effect	Recovery
Display error indicator on affected 3278. Set sense: 1002	Press RESET key to reset the program check indicator and retry the operation. Call host-support programmer if the problem persists, since it is probably a data stream error.
Display error indicator on affected 3278. Set sense: 1003	
Display error indicator on affected 3278. Set sense: 4006	
Display error indicator on affected 3278. Set sense: 4007	
Display error indicator on affected 3278. Set sense: 4007	
Display error indicator on affected 3278. Set sense: 400A	
Display error indicator on affected 3278. Set sense: 400F	
Display error indicator on affected 3278. Set sense: 2001	
Display error indicator on affected 3278. Set sense: 2002	
Display error indicator on affected 3278. Set sense: 2003	
Display error indicator on affected 3278. Set sense: 2005	
Display error indicator on affected 3278. Set sense: 2004	
Display error indicator on affected 3278. Set sense: 0805	
Display error indicator on affected 3278. Set sense: 0813	
Display error indicator on affected 3278. Set sense: 081B	
Display error indicator on affected 3278. Set sense: 081C	
Display error indicator on affected 3278. Set sense: 0829	
Display error indicator on affected 3278. Set sense: 0815	

Error Code	Indicator	Probable Cause
450-456 (SNA)	— Prog Chk	Bind Reject; Bind parameters do not match Bind checks: a. 450 = Profile error b. 451 = Primary protocol error c. 452 = Secondary protocol error d. 453 = Common protocol error e. 454 = Screen Size specification error f. 455 = LU profile error g. 456 = LU1 error
460 (Mdl 1A, 1B, 1C)	— Prog Chk	Error in printer authorization matrix.
498 (SNA)	— Prog Chk	Negative response received.
499 (SNA)	— Prog Chk	Exception request.
501 (Mdl 1C-BSC) (Mdl 1C-SDLC)	— Comm Chk	Data Set Ready (DSR) signal from modem has dropped.
501 (Mdl 1A) (Mdl 1B)	— Comm Chk	Manual OFFLINE switch in the OFF-LINE position.
502 (Mdl 1C-BSC) (Mdl 1C-SDLC)	— Comm Chk	Clear to Send (CTS) signal from the modem is missing.
503 (Mdl 1B)	— Comm Chk	A selective reset sequence was received.
505 (Mdl 1C-SDLC)	— Comm Chk	Initial state of CU, or a Disconnect command was received.
505 (Mdl 1A)	— Comm Chk	
505 (Mdl 1B)	— Comm Chk	System Reset was received.
510 (SNA)	— Comm Chk	The PU is not active.
511 (Mdl 1A)	— Comm Chk	Disconnect command was received when PU was active.
512 (Mdl 1A)	— Comm Chk	Connect command was received when PU was already connected.
514 (Mdl 1A)	— Comm Chk	Connect error caused by: a. Odd-number buffer length was specified, or b. Insufficient length buffer was specified.
518 (Mdl 1C-SDLC)	— Comm Chk	A segment was received with improper sequencing in the TH MPF bits.

Effect	Recovery
Display error indicator on affected 3278. Set sense: 0821	Press RESET key to reset the program check indicator and retry the operation. Call host-support programmer if the problem persists, since it is probably a data stream error.
Display error indicator on 3278 affected.	
Display error indication on affected 3278.	
Display error indication on all 3278's. Host communication is inhibited.	Check modem. Press RESET key and retry the operation.
Host communication is inhibited.	Place switch in the ONLINE position.
Display error indicator on all 3278s. Host communication is inhibited.	Check modem. Press RESET key and retry the operation.
Display error indicator on affected 3278.	Press RESET key and retry the operation.
Display indicator on all 3278s.	Host recovery (a SNRM command is required). Press RESET key and retry the operation.
	Host recovery (a connect sequence is required). Press RESET key and retry the operation.
	Host recovery (the first I/O operation, other than TIO or Sense, will clear the Communication Reminder). Press RESET key and retry the operation.
	Host recovery (ACTPU is required).
	Host recovery (Connect is required).
	Host recovery (ACTPU is required).
Display indicator on all 3278s.	Host recovery (Valid Connect is required).
Display error indicator on all 3278s; all PUs and LUs are deactivated.	Host recovery (SNRM is required).

Error Code	Indicator	Probable Cause
519 (Mdl 1C-SDLC)	— Comm Chk	A message was received that is larger than the CU buffer.
520 (Mdl 1C-SDLC)	— Comm Chk	Non-Productive time-out caused by: a. A valid frame not received in the past 20-25 seconds, or b. The communication line is hung at space or a valid data character.
521 (Mdl 1C-SDLC)	— Comm Chk	No Flag characters on the line in the past 20-25 seconds.
525 (Mdl 1C-SDLC)	— Comm Chk	A connection problem exists on the communications link that prevents establishing or reestablishing host communication. (Set by receipt of 20 Write retries, 20 ROLs, 20 CRs, 20 XIDs, or 20 NSAs.)
528 (Mdl 1C-SDLC)	— Comm Chk	Command Reject caused by: a. Detection of an NR sequence error, or b. Receipt of a command that has no data field defined, or c. Receipt of an invalid command.
529 (Mdl 1C-SDLC)	— Comm Chk	Abnormal response from the modem.
530 (Mdl 1C-BSC) (Mdl 1C-SDLC)	— Comm Chk	Write timeout caused by: a. Modem clocking missing, or b. CTS has dropped.
531 (Mdl 1C-BSC)	— Comm Chk	CU has sent a NAK response because: a. A BCC error was detected, or b. Three seconds elapsed during a Read operation without receiving Syn, ETX, or ETB, or c. A forward abort (ENQ in text) was received, or d. A Temporary Text Delay sequence (STX ENQ) was received.
532 (Mdl 1C-BSC)	— Comm Chk	Approximately 20 seconds have elapsed without detecting SYN characters on the line.

Effect	Recovery
<p><u>CCA</u>: SDLC Command Reject response is sent to host. <u>HPCA</u>: NR/NS mismatch</p>	<p>Host recovery. (Check NCP Sysgen parameters if the condition persists.)</p>
<p>Display error indicator on all 3278's. Host communication is inhibited.</p>	<p>Verify the operational status of the communications network.</p>
	<p>Host recovery.</p>
<p>Display error indicator on all 3278s. Host communication is inhibited. All PUs and LUs are deactivated.</p>	<p>Check modem; Host recovery.</p>
<p>Display error indicator on all 3278s. Host communication is inhibited. In SDLC, all PUs and LUs are deactivated.</p>	<p>Check modem; Host recovery. (In SDLC, SNRM is required.)</p>
<p>Display error indicator on the affected 3278. The affected terminal buffer is restored to its state before the error occurred.</p>	<p>Host recovery (Host should retransmit the last transmission).</p>
<p>Display error indicator on all 3278s. Host communication is inhibited.</p>	<p>Verify the operational status of the communication network. Host recovery. (A valid Poll or Selection Addressing sequence is required.)</p>

Error Code	Indicator	Probable Cause
533 (Mdl 1C-BSC)	— Comm Chk	The host did not receive ETX or ETB with the last block of text transmitted by the CU, and has sent ENQ to the CU.
534 (Mdl 1C-BSC)	— Comm Chk	The CU did not receive ACK to its last block sent, and has sent ENQ 15 times.
535 (Mdl 1C-BSC)	— Comm Chk	The CU received 15 consecutive NAKs to its last transmission.
536 (Mdl 1C-BSC)	— Comm Chk	The CU received 15 consecutive ACK0s instead of ACK1s, or vice versa.
540 (Mdl 1A)	— —	A Restart Reset, Read Start, Write Start, Read, Write, or Write Break command was received while the CU was not initialized.
541 (Mdl 1A)	— —	An invalid command was received.
543 (Mdl 1A)	— —	A channel parity error occurred during selection.
544 (Mdl 1A)	— —	A channel parity error occurred during a host write operation.
545 (Mdl 1A)	— —	A CU parity error occurred during a host write operation.
546 (Mdl 1A)	0001 or 0011-0111 —	A CU parity error occurred during a host read operation.
547 (Mdl 1A)	1001 —	A channel parity error occurred during a host read operation.
548 (Mdl 1A)	1001 or 1011 —	A CU error occurred during an I/O operation.
549 (Mdl 1A)	— —	The byte count specified in the hosts' Read command was insufficient to transfer all associated data from the CU buffer.
550 (Mdl 1A)	— —	The count in the link header did not equal the byte count received.
551 (Mdl 1B)	— Comm Chk	CU detected bad parity on any command or data byte received.

Notes:

1. All three-digit numbers listed in the "Error Code" column are logged.
2. The four-digit numbers listed in the "Indicator" column are displayed on 3278 displays with an associated error code symbol.

Effect	Recovery
Display error indicator on the affected 3278. The affected terminal buffer is restored to its state before the error occurred. The CU will transmit its last ACK (1/0).	Host recovery. (Host should retransmit the last transmission sent that preceded ENQ.)
Display error indicator on the affected 3278. Host communication is inhibited. The CU transmits EOT.	Host recovery. (A valid Poll or Selection Addressing is required.)
Set sense: 8200	Host recovery. (A Connect command is required.)
Set sense: 8000	Host recovery; verify host sysgen for proper device-type.
Set sense: 2002	Host recovery.
Set sense: 2006	Host recovery.
Set sense: 1002	
Set sense: 1006	
Set sense: 1002	
Set sense: 1001	
Set sense: 0800	
Set sense: 0880	
Set sense: 0880	
Display error indicator on affected 3278. Set sense: BOC	

3. Inhibit conditions shown in the "Indicator" column are reset by the 3278 RESET key.
4. The communication reminder indicators used with the 500 series error codes are extinguished when the communication link again becomes functional.

STATUS INDICATOR CODES FOR 3276

Error Code	Indicator	Probable Cause
10 (SDLC)	Sys Chk Light Program Chk: (X PROG 10)	Data stream and/or SNA error.
11 (SDLC)	Sys Chk Light Program Chk: (X PROG 11)	Sense RU from host.
12 (BSC)	Sys Chk Light Program Chk: (X PROG 12)	Command rejected; host programming problem in write data stream.
13 (BSC)	Sys Chk Light Program Chk: (X PROG 13)	Illegal buffer address or in complete order sequence; host programming problem in write data stream.
14 (BSC)	Sys Chk Light Program Chk: (X PROG 14)	Invalid specification of COPY command (e.g., no CCC, invalid "from" address, copy to a smaller display size, etc.)
15 (BSC)	Sys Chk Light Program Chk: (X PROG 15)	Invalid command sequence.
16 (BSC)	Sys Chk Light Program Chk: (X PROG 16)	Line buffer overflow.
20 (BSC)	Sys Chk Light Comm Chk: (X Z20)	3276 sent negative acknowledgment; Block Character Checking error or line error. No ending character received (ETX or ETB); or no SYN characters received within 3 seconds after STX.
20 (SDLC)	None	CRC failed for the message just received.
21 (BSC)	None	3276 received negative acknowledgment; line error.
21 (SDLC)	None	3276 sent previous message(s) again because confirming sequence number was not received.
22 (SDLC)	Sys Chk Light Comm. Chk: (X Z22)	No flags received for 24 to 32 seconds.
23 (BSC)	Sys Chk Light Comm Chk: (X Z23)	15 three-second timeouts occurred with no response or no valid response received for the transmitted text; 3276 component or host facility problem.

Effect	Recovery
<p>Log error code. Display error indication at affected display station.</p>	<p>Valid I-frame or a SNRM received resets all error indications. Press Reset to reset Program Check symbol.</p>
<p>Log error code. Display error indication at affected display station.</p>	<p>Valid PIU to LU or SNRM received resets all error indications. Press Reset to reset Program Check symbol.</p>
<p>Log error code. Display error indication at affected display station. Set BSC Sense: CR. Send EOT. Go to Control mode.</p>	<p>Receipt of poll or selection with 3276 address resets all error indications. Press Reset to reset Program Check symbol. Call host-support programmer if problem persists.</p>
<p>Log error code. Display error indication at affected display station. Set BSC Sense: OC. Send EOT. Go to Control mode.</p>	
<p>Log error count. Display error indication at affected display station. Replace display image with image displayed before receive operation began. For no end character or no SYN, send NAK to host and replace display image with previous image.</p>	<p>Receipt of poll or selection with 3276 address, or of data resets all error indications. If switched network, redial; if SNBU is installed, use it; if error persists, problem is probably in communication facility.</p>
<p>Log error count. Ignore the message. Continue operation.</p>	
<p>Log error count. Continue operation.</p>	<p>If switched network, redial; if SNBU is installed, use it; if error persists, problem is probably in communication facility.</p>
<p>Log error count.</p>	<p>Receipt of confirming sequence number.</p>
<p>Log error code. Display error indication at all display stations.</p>	<p>Valid frame received resets all error indications.</p>
<p>Log error code. Display error indication at all display stations. Go to Control mode.</p>	<p>Receipt of poll or selection with 3276 address resets all error indications. If problem persists, press Test Subsystem: if test succeeds, call host operator; if test fails, problem is probably 3276 component.</p>

Error Code	Indicator	Probable Cause
24 (BSC)	Sys Chk Light Comm Chk: (X Z24)	No valid text received within 15 three-second timeouts after sending ACK or RVI.
25 (SDLC)	Sys Chk Light Comm Chk: (X Z25)	Something in the link is preventing establishment or re-establishment of communication; 20 Write retries or command rejects were effected.
26 (BSC)	Sys Chk Light Comm Chk: (X Z26)	Fifteen continuous ACK0s received, instead of ACK1—or vice versa (Wrong ACK - ENQ exchange).
27 (BSC)	Sys Chk Light Comm Chk: (X Z27)	Fifteen continuous NAKs received for transmitted/retransmitted text.
28 (BSC)		Time out during read.
29 (SDLC)	Sys Chk Light Comm Chk: (X Z29)	Command rejected because: NR sequence error detected; or Data received with command having no data field defined; or wrong length message; or Command invalid.
30 (SDLC)	None	Incoming message abnormally terminated by transmitting station.
33 (BSC and SDLC) External Modem	Sys Chk Light Comm Chk: (X Z 33)	Set by CCA when it detects no DSR, or by momentary loss of DSR; data communications equipment (modem) problem.
34 (BSC and SDLC) External Modem	Sys Chk Light Comm Chk: (X Z 34)	Invalid timeout within the modem, CCA, or EIA — detected by the CCA; for example, modem clock failure, no CS, or momentary loss of CS.
41 (Kybd)	Mach Chk: (X Z 41)	Invalid keyboard code received.
42 (Kybd)	Retry: (X 7+42)	Keystroke lost because of temporary system overload. Keying was attempted when device was busy or not functioning. Conflicting operations were attempted simultaneously; for example, the Clear key was pressed during selector pen operation.

Effect	Recovery
<p>Log error code. Display error indication at affected display station.</p>	<p>Receipt of data, or receipt of poll or selection with 3276 address or receipt of text resets all error indications. If problem persists, press Test Subsystem: if test succeeds, call host operator; if test fails, problem is probably 3276 component.</p>
<p>Log error code. Display error indication at all display stations.</p>	<p>Receipt of expected response (SNRM or DISC), or when Write completion is posted.</p>
<p>Log error code. Display error indication at affected display station. Go to Control mode.</p>	<p>Receipt of poll or selection with 3276 address resets all error indications. If problem persists, call host operator.</p>
<p>Log error code. Display error indication at affected display station. Go to Control mode.</p>	
<p>Log error code. Display error indication at all display stations.</p>	<p>Receipt of valid SNRM type command from host. Press Reset.</p>
<p>Log error. Go to Control mode.</p>	<p>Receipt of valid SDLC frame.</p>
<p>Log error code. Display error indication at all display stations. Go to Control mode (unless it is power on time).</p>	<p>BSC: receipt of Poll or Selection with 3276 address resets all error indication. SDLC: receipt of valid SDLC frame resets all error indication. If problem persists, press Test Subsystem: if test succeeds, problem is probably in modem; if test fails, problem is probably 3276 component.</p>
<p>Log error code. Display error indication at all display stations. Go to Control mode.</p>	
<p>Log error code. Display error indication at affected display station.</p>	<p>Press Reset; retry Keying.</p>
	<p>(If Alt or Alpha was struck just prior to error, restrike to remove keyboard from Alt or Alpha shift status before pressing Reset.) Press Reset, and retry the operation.</p>

Error Code	Indicator	Probable Cause
43 (Feature)	Retry: (X?+43)	MSR data parity error.
44 (Feature)	Mach Chk: (X <input checked="" type="checkbox"/> 44)	Selector pen error.
45 (Feature)	Retry: - (X?+45)	No response/receive parity error from MSR read command.
46 (Prntr)	None	Printer detected a parity error in the printer buffer.
47 (Prntr)	None	Printer hardware error.
59 (Feature)	Mach Chk: (X <input checked="" type="checkbox"/> 59)	Cryptographic device master key parity error.
60 (Feature)	Mach Chk: (X <input checked="" type="checkbox"/> 60)	MSR time error during write command.
61 (Feature)	Mach Chk: (X <input checked="" type="checkbox"/> 61)	Selector Pen Timeout.
63 (Feature)	Mach Chk: (X <input checked="" type="checkbox"/> 63)	Cryptographic device error.
70 (Disp or Prntr)	Mach Chk: (X <input checked="" type="checkbox"/> 70)	Terminal did not respond to a valid control unit transmission.
71 (Disp or Prntr)	Mach Chk: (X <input checked="" type="checkbox"/> 71)	Control unit received data with bad parity from a terminal.

Effect	Recovery
Log error code. Display error indication at affected display station.	Press Reset, and retry the operation. Press Reset, and retry the operation.
Log error code. Disable printer after seven occurrences. Set sense/status: BSC: DC/US (for other than Clear or Search) SNA: 082B, or 081C after seven occurrences.	
Log error code. Disable printer. Set sense/status: BSC: DE EC IR SNA: 081C	
Log error code. Display error indication at affected display station after seven retries.	Press Reset to reset Machine Check symbol (further enciphered sessions are prevented until device is serviced). Press Reset to reset Machine Check symbol; retry operation.
Log error code. Retry.* Disable Selector Pen feature and display error indication at affected display station after seven retries.	At affected display station, switch Normal/Test from Normal to Test and back again to Normal.
Log error code. Display error indication at affected display station after seven retries.	Press Reset to reset Machine Check symbol (further enciphered sessions are prevented until device is serviced).
Log error code. Retry.* Display error indication at affected display station (display may not be successful because of display failure). (No error indication at station if it is a printer.) Disable display (or printer). Set sense/status. BSC: IR SNA: 081C Issue hardware poll and accept only POR from station.	At station, switch Normal/Test from Normal to Test and back again (or switch power off, then on).
Log error code. Retry.* Display error indication at affected display station. (No error indication at station if it is a printer.) Disable display (or printer). Set sense/status. BSC: DC/US SNA: 081C Issue hardware poll and accept only POR from station.	At station, switch Normal/Test from Normal to Test and back again (or switch power off, then on).

*Seven retries are made. (Remaining information in column assumes retries have failed).

Error Code	Indicator	Probable Cause
72 (Disp)	Mach Chk: (X <input checked="" type="checkbox"/> 72)	Control unit received data with bad parity from a display station.
72 (Prntr)	None	Control unit received data with bad parity from a printer.
73 (Disp or Prntr)	Mach Chk: (X <input checked="" type="checkbox"/> 73)	Operation not completed within specific time; Or, received: invalid busy, invalid security key status, invalid (or unsupported) terminal ID; or invalid, buffer address.
74 (Feature)	Mach Chk: (X <input checked="" type="checkbox"/> 74)	Feature requested service, but failed to respond.
75 (MC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 75)	Internal malfunction.
76 (MC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 76)	Internal malfunction.
77 (Disp)	Mach Chk: (X <input checked="" type="checkbox"/> 77)	Regen Buffer (Display) parity error.

Effect	Recovery
<p>Log error code. Retry.* Display error indication at affected display station. Display display. Set sense/status: BSC: DC/US SNA: 081C Issue hardware poll and accept only POR from station.</p>	<p>At station, switch Normal/Test from Normal to Test and back again (or switch power off, then on).</p>
<p>Log error code. Retry.* Display printer. Set sense/status: BSC: DC/US SNA: 081C Issue hardware poll and accept only POR from station.</p>	
<p>Log error code. Display error indication at affected display station. (No error indication at station if it is a printer.) Disable display (or printer). Set sense/status: BSC: DC/US SNA: 081C Issue hardware poll and accept only POR from station.</p>	
<p>Log error code. Display error indication at affected display station. Retry poll.* Disable display. Set sense/status: BSC: DC/US SNA: 081C Issue hardware poll and accept only POR from station.</p>	
<p>Log error code. Retry* Display error indication at affected display station. Stop Poll. Set sense/status: BSC: DC/US SNA: 081C Poll is not issued and POR from station cannot be received.</p>	<p>Press and release Test Subsystem to cause POR sequence. If test fails or error occurs again, problem is probably 3276 component.</p>
<p>Log error code. Retry.* Display error indication at affected display station. Stop Poll. Set sense/status: BSC: DC/US SNA: 081C</p>	
<p>Log error code. Clear display. Display error indication at affected display station. Set sense/status: BSC: DC/US SNA: 082B Disable display if errors exceed threshold of 7. Issue hardware poll and accept only POR from station.</p>	<p>At station, switch Normal/Test from Normal to Test and back again (or switch power off, then on).</p>

*Seven retries are made. (Remaining information in column assumes retries have failed).

Error Code	Indicator	Probable Cause
78 (BSC or SDLC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 78)	Consecutive POR completion signals were received.
79 (BSC or SDLC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 79)	Underrun or overrun has occurred seven times; CCA cannot handle its transmit receive data within proper time; CCA error.
84 (BSC and SDLC)	A problem in the EIA/CCITT card detected during BAT.	
85 (BSC and SDLC Integ Modem)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 85)	Internal timeout occurred during data transmission; 3276 component problem (for example, modem clock failure, CS not active within specified time).
87 (BSC and SDLC) Integ Modem)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 87)	Data-communications equipment error (e.g., DSR may have not risen or fallen on time or unexpectedly, or CTS may have fallen unexpectedly during transmit mode).
88 (BSC and SDLC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 88)	Internal malfunction.
89 (MC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 89)	Invalid parity in data.
90 (MC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 90)	Invalid I/O operation with CCA.
91 (MC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 91)	Invalid I/O operation with system logic card.
92-98 (MC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 92-98)	A storage parity error occurred.
99 (MC)	Mach Chk Light Mach Chk: (X <input checked="" type="checkbox"/> 99)	Invalid code; storage or control card failure.

Effect	Recovery
Log error code. Display error indication at affected display station. Stop poll. Set sense/status: BSC: DC/US SNA: 081C	Press and release Test Subsystem to cause POR sequence. If test fails or error occurs again, problem is probably 3276 component.
Log error code. Retry.* Display error indication at all stations. \leq Turn off Line Ready (OK). Stop machine.	
	Press and release test Subsystem to repeat BAT. If test fails or error occurs again, problem is probably 3276 component.
Integrated modem: Log error code. Display error indication at all display stations. \leq Turn off Line Ready (OK). Stop machine.	Press and release Test subsystem. If test fails or error occurs again, problem is probably 3276 component.
Integrated modem: Log error code. Display error indications at all display stations. \geq Turn off Line Ready (OK). Stop machine.	
Log error code. Display error indication at all display stations. \geq Turn off Line Ready (OK). Stop machine.	
Log error code. Retry.* Display error indication at all display stations. \geq Turn off Line Ready (OK). Stop machine.	
Log error code. Retry.* Display error indication at all display stations. Stop machine.	
Log error code. Display error indication and failing FRU at all display stations. Stop machine.	

*Seven retries are made. (Remaining information in column assumes retries have failed).

Error Code	Indicator	Probable Cause
21-79 (SDLC)	Sys.Chk Light Program Chk: (X PROG 21-79)	21: EXR from upstream node. 22: Invalid OAF for PU (800F). 23: PU Not Active (sense bits 8008). 24: Unrecognized DAF (sense bits 8004). 25: Segmenting Error. 26: LU is not active (sense bits 8009). 27: No LU-LU session (sense bits 8005). 28: Invalid ACTPU parameter (0821). 30: Data Traffic Reset state (sense bits 2005). 31: Sequence number error (sense bits 2001). 32: FM data chaining error (sense bits 2002). 33: Normal flow DFC in INC state (sense bits 2002). 34: BB is not found on FM data request (sense bits 2003). 35: DFC carries EB in BETB (sense bits 2003). 40: Invalid 3270 command (sense bits 1003). 41: Data follows READ type command (sense bits 1003). 42: Nonsupported SNA command (sense bits 1003). 43: Control Function carried Null RU (sense bits 1003). 44: Invalid SIGNAL request code (sense bits 1003). 50: ORDER with invalid buffer address (sense bits 1005). 51: Incomplete order sequence (sense bits 1005). 59: FI bit in RHO is not supported (sense bits 400F). 60: CD in RH2 is required (sense bits 0829). 61: Device check on printer during copy (sense bits 0843). 68: Invalid ACTLU parameter (sense bits 0821). 69: Sec. BIND is received from current PLU (sense bits 0815). 70: Session limit exceeded (sense bits 0805). 71: Bind RU is incomplete (sense bits 0821). 72: Invalid support level (RU1-3) (sense bits 0821). 73: Invalid PLU protocol (RU4) (sense bits 0821). 74: Invalid SLU protocol (RU5) (sense bits 0821). 75: Invalid common protocol (RU6, 7) (sense bits 0821).

Effect	Recovery
<p>Log error.</p> <p>Note: <i>Code 10 is logged regardless of code displayed.</i></p> <p>Display error indication at affected display station; if it cannot be displayed there, display it at all other display stations.</p> <p>Set sense bits XXXX (as indicated in adjacent column).</p>	<p>Press Reset.</p> <p>Await recovery from host.</p>

Error Code	Indicator	Probable Cause
21-79 (SDLC)	Sys Chk Light Program Chk: (X PROG (21-79)	76: Too small RU length (RU10) (sense bits 0821). 77: Too large buffer size (RU9, 11) (sense bits 0821). 78: Invalid LU type (RU14) (sense bits 0821). 79: Invalid screen size (RU20-24) (sense bits 0821). 80: Cryptography not supported; BIND parameter error (RU26) (sense bits 0821). 82: Cryptographic session (BIND) parameter error (sense bits 0821). 85: Cryptographic state error (sense bits 2009). 86: CRV failure (sense bits 0821). 87: Cryptographic RU data error (sense bits 1001).

PRINTER STATUS INDICATOR CODES FOR 3284

Status Indicator Code	Name	Alarm**	Applicable to:		
			3271/3272 Attachment	3274/3276 Attachment	
01	End of Form	X	X	X	
07*	Received Invalid Order	X		X	
08	Hold Print Timeout (10 minutes)		X	X	
09	Operator Check (Operation Invalid)		X	X	
27*	Subsystem Not Ready or Bad Cable			X	
31	End of Form Timeout (60 seconds)			X	
41*	Wire Fire Check	X	X	X	
42*	Printer Not Ready	X	X	X	
43*	Form Feed Error	X	X	X	
44*	Emitter Check	X	X	X	
45*	Emitter Sequence Error	X	X	X	
46*	Carrier Timer Overflow	X	X	X	
47*	Carrier Drive Error	X	X	X	
50*	Selector Switch Error	X	X	X	
51*	Data Count Error	X	X	X	
52*	Internal Timeout	X		X	
59	Cancel Selected			X	
61	PA1 Selected			X	
62	PA2 Selected			X	
63	Printer in Send State	X		X	
67	Buffer Reprint			X	
81	Internal Parity or CU Communication Error		X	X	
82			X	X	
83			X	X	
84			X	X	
85			X	X	
86				X	X
87				X	X
88				X	X
89				X	X
90				X	X
91				X	X
92				X	X
94				X	X
99		Invalid Diagnostic Section Selected (Feature Support)		X	X

* Reset with the Reset switch.

** Alarm will be repetitively sounded for these status indicator codes and the Alarm Poll and SCS Bell commands. Alarm may be turned off by pressing the Hold Print Switch.

Effect	Recovery
Log error. Note: Code 10 is logged regardless of code displayed. Display error indication at affected display station; if it cannot be displayed there, display it at all other display stations. Set sense bits XXXX (as indicated in adjacent column).	Press Reset Await recovery from host.

BIND DEFAULT FOR SNA 3274/3276

The following is suggested as a setting for the access method logmode table for LU type 1:

Byte	Binary bits
—	0123 4567
0	0011 0001
1	0000 0001
2	0000 0011
3	0000 0011
4	1011 0001
5	1001 0000
6	0011 0000
7	1000 0000
8	0000 0000
9	0000 0001
10	1000 0101
11	1000 0101 (3276)
	1000 0111 (3274)
12-13	0000 0000
14	0000 0001
15-17	0000 0000
18	1110 0001
19-26	0000 0000

The suggested settings for LU type 2 are the same as for LU type 1 except for:

Byte	Binary bits
—	0123 4567
9	0000 0000
10	1000 0111
14	0000 0010
18	0000 0000
24	0000 0001 Model 1
24	0000 0010 Model 2

The suggested settings for LU type 3 are the same as for LU type 1 except for:

Byte	Binary bits
—	0123 4567
9	0000 0000
14	0000 0011
18	0000 0000
24	0000 0000

SNA SENSE CODES

**Sense
Byte
One**

Description

Path Error X'80'

X'04' Unrecognized DAF'
Controller does not have a terminal adapter for
the DAF address.

X'05' – NO SESSION

- A Bind has not been received or accepted by the 3274 or 3276.
- A request other than Bind is sent to an SLU which has already accepted a Bind, and the OAF' is not X'00' or the OAF in the accepted Bind.

X'08' – PU NOT Active

The 3274 or 3276 has not received or accepted an ACTPU, or a control condition caused an internally generated DACTPU.

X'09' – LU NOT Active

The 3274 or 3276 has not received or accepted an ACTLU, or a control condition caused an internally generated DACTLU.

X'0F' – Invalid Address Combination

A request was addressed to the PU (DAF'=X'00'), and the OAF was not SSCP (OAF'=X'00').

RH Error X'40'

X'06' – Exception Response Not Allowed (3274)

LIC carried exception response when Bind specified definite response.

X'07' – Definite Response Not Allowed (3274)

LIC Carried definite response when Bind specified exception response or \neg LIC carried definite response.

X'0A' – No-Response Not Allowed (3274)

A chain element did not have DR1, DR2, or the exception bit set to 1.

X'0F' – Format Indicator Not Allowed

An FM request received by the 3274 or 3276 indicated formatted header included.

State Error X'20'

X'01' – Sequence Number Error

The sequence number of the normal flow request did not match the number expected by the 3274 or 3276.

X'02' – Chaining Error

Chain elements were out of protocol sequence.

X'03' – Bracket State Error

A Bracket state error occurred.

X'04' – Direction Error (3274)

A normal flow without begin bracket was received while the 3274 was in Send state.

X'05' – Data Traffic Reset

An FM or DFC request was received before an SDT was received or accepted.

Request Error X'10'

X'02' – RH Length Error (3274 Model1A)

3274 link buffer overflow occurred.

SNA SENSE CODES

Sense

Byte

One

Description

X'03' – Function Not Supported

- Unsupported Session Control Request
- Unsupported Data Flow Control Request
- SIGNAL Code is not X'00010000'
- Network Control Request
- FM Data Stream
- Invalid Command
 - Data Following a Read, RM, RMA, or EAU command
 - For LU type 3, any Read, RM or RMA command.

X'05' – Parameter Error

Invalid address following SBA, RA, or EUA order (SBA, RA, or EUA order without parameters), or SCS parameter error.

X'07' – Category Not Supported

- An FMD request from the SSCP was received by a SLU which has an attached device without a keyboard.
- An unsupported network service message received.

Request Reject X'08'

X'01' – Resource Not Available

- LU type 2 (3274), A printer is not allowed by the Authorization Matrix
- For LU type 1 or 3 (3274), Bind reject because printer is authorized for Local mode only.
- For LU type 1 (3276), outbound pacing algorithm is overrun.

X'02' – Intervention Required (on principal device).

- For LU type 2, security key is tuned off
- For LU type 1 or 3, printer condition such as end of form, paper jam, printer cover up, or hold time out.

X'05' – Session Limit Exceeded

A Bind was received whose OAF' differs from the PLU already bound.

X'07' – Subsidiary Device Temporarily Not Available (3276)

For LU type 2, a printer to be copied to is In Bracket on an LU type 1 or 3 session, or an operator has depressed Device Cancel key.

X'0A' - Permission Rejected

Display or printer power is off. The SSCP will not be notified when the device powers on.

X'11' – Break

Sent on LU type 1 when the operator depresses the printer Hold Print key followed by Cancel key, if a chain has not completed printing.

X'13' – Bracket Bid Reject – (No RTR)

- Returned by LU types 1 and 2 to a BID or BID with Begin Bracket if the display has won contention and started a bracket.
- Returned by all LU types, when a BID or Begin Bracket was received, and INB state already exists. This may be a protocol error.

SNA SENSE CODES

<u>Sense Byte One</u>	<u>Description</u>
X'14'	Bracket Bid Reject – (RTR to follow). (3276) For LU type 1 or 3, the printer is busy doing local copy from a display. RTR will be returned when the printer becomes not busy with local copy.
X'15'	Function Active Bind reject if the same OAF' already has an accepted Bind to the SLU.
X'1B'	Receiver in Transmit Mode <ul style="list-style-type: none">• The SLU is Between Bracket but a data key has been depressed.• An FM message was received from the SSCP while the display was owned by the PLU-SLU session or is in Test mode.• An SSCP FM message is rejected if local copy is taking place while the SSCP-SLU session owns the display.
X'1C'	Request Not Executable The 3274 or 3276 has a nonrecoverable error.
X'21'	Invalid Session Parameters <ul style="list-style-type: none">• Bind parameters do not match the 3274 or 3276 Bind checks.• 3276 rejection of ACTPU or ACTLU if FM/TS profile byte is not X'01'
X'29'	Change Direction Required A 3270 read-type command was received without a Change Direction, or for the 3274 with an End Bracket.
X'2A'	Presentation Space Altered, Request Executed An LU type 2 3277 attached to a 3274 has a reset keyboard, and tried to enter while in receive state.
X'2B'	Presentation Space Integrity Lost <ul style="list-style-type: none">• A temporary error has occurred; for example, parity check in device.• An operator has cleared the display by switching to SSCP-SLU session or Test mode and returned to PLU-SLU session.
X'2D'	SLU Busy <ul style="list-style-type: none">• LU type 2 Display is owned by SSCP-SLU session or Test mode.• LU type 2 Display is busy doing an operator-initiated local copy.• LU type 2 3277 attached to 3274 is busy with a Back Tab.
X'2E'	Intervention Required at Subsidiary Device. For LU type 2, a printer being copied to from a host-initiated print has intervention-required type error. Refer X'0802'. Printer power off or not attached to the controller is included in this category.
X'2F'	Request Not Executable Because of LU Subsidiary Device. For LU type 2, a printer being copied to has a nonrecoverable error.
X'4A'	Presentation Space Altered, Request Not Executed Refer to X'2A.'

SNA SENSE CODES

Sense

Byte

One Description

X'31' – LU Component Disconnected

This response is returned if the device attached to the 3274 or 3276 cannot be contacted by a device poll. This is due to device power off, cable detached from the controller port, or connecting cable broken.

Note: *this response is also returned on the SSCP-SLU session by the 3276.*

X'43' – Required Function Manager Synchronization Not Supplied (3274)

For LU type 2 or 3 chains having the print bit on, must be definite response or exception response chain must carry CD.

LOGICAL UNIT STATUS CODES

LUSTAT Returned

Negative Response Code	LU TYPE			
	T1	T2	T3	SSCP
0802	00010000	0001D000	00010000	NA
	082B0000	082B0000	082B0000	
	081C0000	081CD000	081C0000	
	08310000	08310000	08310000	
0807	NA	0001B000	NA	NA
		0801B000		
		081CB000		
		081CD000		
082D	NA	0001D000	NA	NA
		082B0000		
		081CD000		
082E	NA	0001B000	NA	NA
		0801B000		
		081CB000		
		081CD000		
0831	082B0000	082B0000	082B0000	NA
	081C0000	081CD000	081C0000	NA

Sent By

LUSTAT	LU TYPE		
	T1	T2	T3
<u>SEND</u>			
<u>BETB</u>			
<u>ERP.1</u>			
00020000	X	X	X
081C0000	X		X
081CB000		X	
081CD000		X	
082B0000	X	X	X
08310000	X	X	X
0801B000		X	

ERROR RECOVERY PROCEDURES

The following sense codes are returned by a negative response or an LUSTAT. Suggested recovery procedures are indicated for each error code and must be evaluated for the needs of each user.

Negative Response Codes:

<u>Error Code</u>	<u>Recovery Procedures (See Note(s))</u>
Path errors X'80xx'	1
RH errors X'40xx'	2
State errors X'20xx'	2,3
Request errors X'10xx'	2,21
Request Reject: X'08xx'	See Note(s)

<u>Hex 'xx'</u>	<u>LU Type 1</u>	<u>LU Type 2</u>	<u>LU Type 3</u>
01	5	5 or 6	5
02	8	7	8
05	4	4	4
07	NA	7	NA
0A	4	4	4
11	9	NA	NA
13	10,11	10,11	10,11
14	12	NA	12
15	4	4	4
1B	NA	13	NA
1C	3,4	3,4	3,4
21	1	1	1
29	3,4	3,4	3,4
2A	NA	14	NA
2B	16	16	16
2D	NA	7	NA
2E	NA	7	NA
2F	NA	17	NA
31	7	7,18	7
43	NA	7,19	7,19

LUSTAT Sense Codes:

<u>Hex Code</u>	<u>Recovery Procedure (See Note(s))</u>
0001 0000	9a
0001 B000	9a
0001 D000	9a
0002 0000	21
082B 0000	16
081C 0000	3
081C B000	17
081C D000	3
0831 0000	7,18,20
0801 B000	6,17

Recovery Notes:

1. No recovery action can be taken until the 'xx' condition reported is corrected.
2. Unbind and correct program code.
3. Retry the operation up to three times by sending Clear, SDT, and starting traffic at a program check-point restart. Terminate the operation if the retries are not successful.
4. No recovery; look for an alternate terminal or terminate the operation.
5. Unbind, and look for an alternate terminal, or terminate the operation.
6. Read the display, and save for later printout.
7. Wait for LUSTAT; recovery based on LUSTAT code.
8. Wait for LUSTAT; retransmit chain.
9. User options:
 - a. Resend chain.
 - b. Send next chain.
 - c. Send query to printer operator for PA key response.
10. Check the input queue for inbound data with BB and CD.
11. Protocol error occurred. Retry without BID or BB.
12. Wait for RTR to begin bracket.
13.
 - a. Check the input queue, and wait for data.
 - b. Send SIGNAL to get CD.
14. Retry with CD and not EB.
15. User options:
 - a. Send Null or comment RU with CD to give control to operator.
 - b. Send Read Modified command with CD to obtain display AIDS and modified data.
 - c. Reformat display from check-point restart.
16. Reformat display or printer from check-point restart.
17. Retry the operation up to three times by use of Write command and WCC with Start Print bit set to 1. An alternate printer may become available.
18. Unbind to force user identification by entering new logon.
19. Retry with correct bit settings.
20. When received, the user must be sure the secondary logical unit is in ERP1 or send state, to allow sending the LUSTAT which indicates a power-on condition. The 3276 requires user action to change state if it has sent LUSTAT 08310000 while BETB.
21. Program dependent:
 - a. If input is required from terminal, unbind and select an alternate terminal.
 - b. If input is not required, data output may continue. CD should be suppressed.

BUFFER ADDRESS I/O INTERFACE CODES

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
01	01	01	01	0000	0000	40	40	20	20
01	02	01	02	0001	0001	40	C1	20	41
01	03	01	03	0002	0002	40	C2	20	42
01	04	01	04	0003	0003	40	C3	20	43
01	05	01	05	0004	0004	40	C4	20	44
01	06	01	06	0005	0005	40	C5	20	45
01	07	01	07	0006	0006	40	C6	20	46
01	08	01	08	0007	0007	40	C7	20	47
01	09	01	09	0008	0008	40	C8	20	48
01	10	01	10	0009	0009	40	C9	20	49
01	11	01	11	0010	000A	40	4A	20	5B
01	12	01	12	0011	000B	40	4B	20	2E
01	13	01	13	0012	000C	40	4C	20	3C
01	14	01	14	0013	000D	40	4D	20	28
01	15	01	15	0014	000E	40	4E	20	2B
01	16	01	16	0015	000F	40	4F	20	21
01	17	01	17	0016	0010	40	50	20	26
01	18	01	18	0017	0011	40	D1	20	4A
01	19	01	19	0018	0012	40	D2	20	4B
01	20	01	20	0019	0013	40	D3	20	4C
01	21	01	21	0020	0014	40	D4	20	4D
01	22	01	22	0021	0015	40	D5	20	4E
01	23	01	23	0022	0016	40	D6	20	4F
01	24	01	24	0023	0017	40	D7	20	50
01	25	01	25	0024	0018	40	D8	20	51
01	26	01	26	0025	0019	40	D9	20	52
01	27	01	27	0026	001A	40	5A	20	5D
01	28	01	28	0027	001B	40	5B	20	24
01	29	01	29	0028	001C	40	5C	20	2A
01	30	01	30	0029	001D	40	5D	20	29
01	31	01	31	0030	001E	40	5E	20	3B
01	32	01	32	0031	001F	40	5F	20	5E
01	33	01	33	0032	0020	40	60	20	2D
01	34	01	34	0033	0021	40	61	20	2F
01	35	01	35	0034	0022	40	E2	20	53
01	36	01	36	0035	0023	40	E3	20	54
01	37	01	37	0036	0024	40	E4	20	55
01	38	01	38	0037	0025	40	E5	20	56
01	39	01	39	0038	0026	40	E6	20	57
01	40	01	40	0039	0027	40	E7	20	58
02	01	01	41	0040	0028	40	E8	20	59
02	02	01	42	0041	0029	40	E9	20	5A
02	03	01	43	0042	002A	40	6A	20	7C
02	04	01	44	0043	002B	40	6B	20	2C
02	05	01	45	0044	002C	40	6C	20	25
02	06	01	46	0045	002D	40	6D	20	5F
02	07	01	47	0046	002E	40	6E	20	3E
02	08	01	48	0047	002F	40	6F	20	3F
02	09	01	49	0048	0030	40	F0	20	30
02	10	01	50	0049	0031	40	F1	20	31
02	11	01	51	0050	0032	40	F2	20	32
02	12	01	52	0051	0033	40	F3	20	33
02	13	01	53	0052	0034	40	F4	20	34
02	14	01	54	0053	0035	40	F5	20	35
02	15	01	55	0054	0036	40	F6	20	36
02	16	01	56	0055	0037	40	F7	20	37
02	17	01	57	0056	0038	40	F8	20	38
02	18	01	58	0057	0039	40	F9	20	39
02	19	01	59	0058	003A	40	7A	20	3A
02	20	01	60	0059	003B	40	7B	20	23
02	21	01	61	0060	003C	40	7C	20	40
02	22	01	62	0061	003D	40	7D	20	27

Legend:

R = Row

C = Column

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
02	23	01	63	0062	003E	40	7E	20	3D
02	24	01	64	0063	003F	40	7F	20	22
02	25	01	65	0064	0040	C1	40	41	20
02	26	01	66	0065	0041	C1	C1	41	41
02	27	01	67	0066	0042	C1	C2	41	42
02	28	01	68	0067	0043	C1	C3	41	43
02	29	01	69	0068	0044	C1	C4	41	44
02	30	01	70	0069	0045	C1	C5	41	45
02	31	01	71	0070	0046	C1	C6	41	46
02	32	01	72	0071	0047	C1	C7	41	47
02	33	01	73	0072	0048	C1	C8	41	48
02	34	01	74	0073	0049	C1	C9	41	49
02	35	01	75	0074	004A	C1	4A	41	5B
02	36	01	76	0075	004B	C1	4B	41	2E
02	37	01	77	0076	004C	C1	4C	41	3C
02	38	01	78	0077	004D	C1	4D	41	28
02	39	01	79	0078	004E	C1	4E	41	2B
02	40	01	80	0079	004F	C1	4F	41	21
03	01	02	01	0080	0050	C1	50	41	26
03	02	02	02	0081	0051	C1	D1	41	4A
03	03	02	03	0082	0052	C1	D2	41	4B
03	04	02	04	0083	0053	C1	D3	41	4C
03	05	02	05	0084	0054	C1	D4	41	4D
03	06	02	06	0085	0055	C1	D5	41	4E
03	07	02	07	0086	0056	C1	D6	41	4F
03	08	02	08	0087	0057	C1	D7	41	50
03	09	02	09	0088	0058	C1	D8	41	51
03	10	02	10	0089	0059	C1	D9	41	52
03	11	02	11	0090	005A	C1	5A	41	5D
03	12	02	12	0091	005B	C1	5B	41	24
03	13	02	13	0092	005C	C1	5C	41	2A
03	14	02	14	0093	005D	C1	5D	41	29
03	15	02	15	0094	005E	C1	5E	41	3B
03	16	02	16	0095	005F	C1	5F	41	5E
03	17	02	17	0096	0060	C1	60	41	2D
03	18	02	18	0097	0061	C1	61	41	2F
03	19	02	19	0098	0062	C1	E2	41	53
03	20	02	20	0099	0063	C1	E3	41	54
03	21	02	21	0100	0064	C1	E4	41	55
03	22	02	22	0101	0065	C1	E5	41	56
03	23	02	23	0102	0066	C1	E6	41	57
03	24	02	24	0103	0067	C1	E7	41	58
03	25	02	25	0104	0068	C1	E8	41	59
03	26	02	26	0105	0069	C1	E9	41	5A
03	27	02	27	0106	006A	C1	6A	41	7C
03	28	02	28	0107	006B	C1	6B	41	2C
03	29	02	29	0108	006C	C1	6C	41	25
03	30	02	30	0109	006D	C1	6D	41	5F
03	31	02	31	0110	006E	C1	6E	41	3E
03	32	02	32	0111	006F	C1	6F	41	3F
03	33	02	33	0112	0070	C1	F0	41	30
03	34	02	34	0113	0071	C1	F1	41	31
03	35	02	35	0114	0072	C1	F2	41	32
03	36	02	36	0115	0073	C1	F3	41	33
03	37	02	37	0116	0074	C1	F4	41	34
03	38	02	38	0117	0075	C1	F5	41	35
03	39	02	39	0118	0076	C1	F6	41	36
03	40	02	40	0119	0077	C1	F7	41	37
04	01	02	41	0120	0078	C1	F8	41	38
04	02	02	42	0121	0079	C1	F9	41	39
04	03	02	43	0122	007A	C1	7A	41	3A
04	04	02	44	0123	007B	C1	7B	41	23

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
04	05	02	45	0124	007C	C1	7C	41	40
04	06	02	46	0125	007D	C1	7D	41	27
04	07	02	47	0126	007E	C1	7E	41	3D
04	08	02	48	0127	007F	C1	7F	41	22
04	09	02	49	0128	0080	C2	40	42	20
04	10	02	50	0129	0081	C2	C1	42	41
04	11	02	51	0130	0082	C2	C2	42	42
04	12	02	52	0131	0083	C2	C3	42	43
04	13	02	53	0132	0084	C2	C4	42	44
04	14	02	54	0133	0085	C2	C5	42	45
04	15	02	55	0134	0086	C2	C6	42	46
04	16	02	56	0135	0087	C2	C7	42	47
04	17	02	57	0136	0088	C2	C8	42	48
04	18	02	58	0137	0089	C2	C9	42	49
04	19	02	59	0138	008A	C2	4A	42	5B
04	20	02	60	0139	008B	C2	4B	42	2E
04	21	02	61	0140	008C	C2	4C	42	3C
04	22	02	62	0141	008D	C2	4D	42	28
04	23	02	63	0142	008E	C2	4E	42	2B
04	24	02	64	0143	008F	C2	4F	42	21
04	25	02	65	0144	0090	C2	50	42	26
04	26	02	66	0145	0091	C2	D1	42	4A
04	27	02	67	0146	0092	C2	D2	42	4B
04	28	02	68	0147	0093	C2	D3	42	4C
04	29	02	69	0148	0094	C2	D4	42	4D
04	30	02	70	0149	0095	C2	D5	42	4E
04	31	02	71	0150	0096	C2	D6	42	4F
04	32	02	72	0151	0097	C2	D7	42	50
04	33	02	73	0152	0098	C2	D8	42	51
04	34	02	74	0153	0099	C2	D9	42	52
04	35	02	75	0154	009A	C2	5A	42	5D
04	36	02	76	0155	009B	C2	5B	42	24
04	37	02	77	0156	009C	C2	5C	42	2A
04	38	02	78	0157	009D	C2	5D	42	29
04	39	02	79	0158	009E	C2	5E	42	3B
04	40	02	80	0159	009F	C2	5F	42	5E
05	01	03	01	0160	00A0	C2	60	42	2D
05	02	03	02	0161	00A1	C2	61	42	2F
05	03	03	03	0162	00A2	C2	E2	42	53
05	04	03	04	0163	00A3	C2	E3	42	54
05	05	03	05	0164	00A4	C2	E4	42	55
50	06	03	06	0165	00A5	C2	E5	42	56
05	07	03	07	0166	00A6	C2	E6	42	57
05	08	03	08	0167	00A7	C2	E7	42	58
05	09	03	09	0168	00A8	C2	E8	42	59
05	10	03	10	0169	00A9	C2	E9	42	5A
05	11	03	11	0170	00AA	C2	6A	42	7C
05	12	03	12	0171	00AB	C2	6B	42	2C
05	13	03	13	0172	00AC	C2	6C	42	25
05	14	03	14	0173	00AD	C2	6D	42	5F
05	15	03	15	0174	00AE	C2	6E	42	3E
05	16	03	16	0175	00AF	C2	6F	42	3F
05	17	03	17	0176	00B0	C2	F0	42	30
05	18	03	18	0177	00B1	C2	F1	42	31
05	19	03	19	0178	00B2	C2	F2	42	32
05	20	03	20	0179	00B3	C2	F3	42	33
05	21	03	21	0180	00B4	C2	F4	42	34
05	22	03	22	0181	00B5	C2	F5	42	35
05	23	03	23	0182	00B6	C2	F6	42	36
05	24	03	24	0183	00B7	C2	F7	42	37
05	25	03	25	0184	00B8	C2	F8	42	38
05	26	03	26	0185	00B9	C2	F9	42	39

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
05	27	03	27	0186	00BA	C2	7A	42	3A
05	28	03	28	0187	00BB	C2	7B	42	23
05	29	03	29	0188	00BC	C2	7C	42	40
05	30	03	30	0189	00BD	C2	7D	42	27
05	31	03	31	0190	00BE	C2	7E	42	3D
05	32	03	32	0191	00BF	C2	7F	42	22
05	33	03	33	0192	00C0	C3	40	43	20
05	34	03	34	0193	00C1	C3	C1	43	41
05	35	03	35	0194	00C2	C3	C2	43	42
05	36	03	36	0195	00C3	C3	C3	43	43
05	37	03	37	0196	00C4	C3	C4	43	44
05	38	03	38	0197	00C5	C3	C5	43	45
05	39	03	39	0198	00C6	C3	C6	43	46
05	40	03	40	0199	00C7	C3	C7	43	47
06	01	03	41	0200	00C8	C3	C8	43	48
06	02	03	42	0201	00C9	C3	C9	43	49
06	03	03	43	0202	00CA	C3	4A	43	5B
06	04	03	44	0203	00CB	C3	4B	43	2E
06	05	03	45	0204	00CC	C3	4C	43	3C
06	06	03	46	0205	00CD	C3	4D	43	28
06	07	03	47	0206	00CE	C3	4E	43	2B
06	08	03	48	0207	00CF	C3	4F	43	21
06	09	03	49	0208	00D0	C3	50	43	26
06	10	03	50	0209	00D1	C3	D1	43	4A
06	11	03	51	0210	00D2	C3	D2	43	4B
06	12	03	52	0211	00D3	C3	D3	43	4C
06	13	03	53	0212	00D4	C3	D4	43	4D
06	14	03	54	0213	00D5	C3	D5	43	4E
06	15	03	55	0214	00D6	C3	D6	43	4F
06	16	03	56	0215	00D7	C3	D7	43	50
06	17	03	57	0216	00D8	C3	D8	43	51
06	18	03	58	0217	00D9	C3	D9	43	52
06	19	03	59	0218	00DA	C3	5A	43	5D
06	20	03	60	0219	00DB	C3	5B	43	24
06	21	03	61	0220	00DC	C3	5C	43	2A
06	22	03	62	0221	00DD	C3	5D	43	29
06	23	03	63	0222	00DE	C3	5E	43	3B
06	24	03	64	0223	00DF	C3	5F	43	5E
06	25	03	65	0224	00E0	C3	60	43	2D
06	26	03	66	0225	00E1	C3	61	43	2F
06	27	03	67	0226	00E2	C3	E2	43	53
06	28	03	68	0227	00E3	C3	E3	43	54
06	29	03	69	0228	00E4	C3	E4	43	55
06	30	03	70	0229	00E5	C3	E5	43	56
06	31	03	71	0230	00E6	C3	E6	43	57
06	32	03	72	0231	00E7	C3	E7	43	58
06	33	03	73	0232	00E8	C3	E8	43	59
06	34	03	74	0233	00E9	C3	E9	43	5A
06	35	03	75	0234	00EA	C3	6A	43	7C
06	36	03	76	0235	00EB	C3	6B	43	2C
06	37	03	77	0236	00EC	C3	6C	43	25
06	38	03	78	0237	00ED	C3	6D	43	5F
06	39	03	79	0238	00EE	C3	6E	43	3E
06	40	03	80	0239	00EF	C3	6F	43	3F
07	01	04	01	0240	00F0	C3	F0	43	30
07	02	04	02	0241	00F1	C3	F1	43	31
07	03	04	03	0242	00F2	C3	F2	43	32
07	04	04	04	0243	00F3	C3	F3	43	33
07	05	04	05	0244	00F4	C3	F4	43	34
07	06	04	06	0245	00F5	C3	F5	43	35
07	07	04	07	0246	00F6	C3	F6	43	36
07	08	04	08	0247	00F7	C3	F7	43	37

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
07	09	04	09	0248	00F8	C3	F8	43	38
07	10	04	10	0249	00F9	C3	F9	43	39
07	11	04	11	0250	00FA	C3	7A	43	3A
07	12	04	12	0251	00FB	C3	7B	43	23
07	13	04	13	0252	00FC	C3	7C	43	40
07	14	04	14	0253	00FD	C3	7D	43	27
07	15	04	15	0254	00FE	C3	7E	43	3D
07	16	04	16	0255	00FF	C3	7F	43	22
07	17	04	17	0256	0100	C4	40	44	20
07	18	04	18	0257	0101	C4	C1	44	41
07	19	04	19	0258	0102	C4	C2	44	42
07	20	04	20	0259	0103	C4	C3	44	43
07	21	04	21	0260	0104	C4	C4	44	44
07	22	04	22	0261	0105	C4	C5	44	45
07	23	04	23	0262	0106	C4	C6	44	46
07	24	04	24	0263	0107	C4	C7	44	47
07	25	04	25	0264	0108	C4	C8	44	48
07	26	04	26	0265	0109	C4	C9	44	49
07	27	04	27	0266	010A	C4	4A	44	5B
07	28	04	28	0267	010B	C4	4B	44	2E
07	29	04	29	0268	010C	C4	4C	44	3C
07	30	04	30	0269	010D	C4	4D	44	28
07	31	04	31	0270	010E	C4	4E	44	2B
07	32	04	32	0271	010F	C4	4F	44	21
07	33	04	33	0272	0110	C4	50	44	26
07	34	04	34	0273	0111	C4	D1	44	4A
07	35	04	35	0274	0112	C4	D2	44	4B
07	36	04	36	0275	0113	C4	D3	44	4C
07	37	04	37	0276	0114	C4	D4	44	4D
07	38	04	38	0277	0115	C4	D5	44	4E
07	39	04	39	0278	0116	C4	D6	44	4F
07	40	04	40	0279	0117	C4	D7	44	50
08	01	04	41	0280	0118	C4	D8	44	51
08	02	04	42	0281	0119	C4	D9	44	52
08	03	04	43	0282	011A	C4	5A	44	5D
08	04	04	44	0283	011B	C4	5B	44	24
08	05	04	45	0284	011C	C4	5C	44	2A
08	06	04	46	0285	011D	C4	5D	44	29
08	07	04	47	0286	011E	C4	5E	44	3B
08	08	04	48	0287	011F	C4	5F	44	5E
08	09	04	49	0288	0120	C4	60	44	2D
08	10	04	50	0289	0121	C4	61	44	2F
08	11	04	51	0290	0122	C4	E2	44	53
08	12	04	52	0291	0123	C4	E3	44	54
08	13	04	53	0292	0124	C4	E4	44	55
08	14	04	54	0293	0125	C4	E5	44	56
08	15	04	55	0294	0126	C4	E6	44	57
08	16	04	56	0295	0127	C4	E7	44	58
08	17	04	57	0296	0128	C4	E8	44	59
08	18	04	58	0297	0129	C4	E9	44	5A
08	19	04	59	0298	012A	C4	6A	44	7C
08	20	04	60	0299	012B	C4	6B	44	2C
08	21	04	61	0300	012C	C4	6C	44	25
08	22	04	62	0301	012D	C4	6D	44	5F
08	23	04	63	0302	012E	C4	6E	44	3E
08	24	04	64	0303	012F	C4	6F	44	3F
08	25	04	65	0304	0130	C4	F0	44	30
08	26	04	66	0305	0131	C4	F1	44	31
08	27	04	67	0306	0132	C4	F2	44	32
08	28	04	68	0307	0133	C4	F3	44	33
08	29	04	69	0308	0134	C4	F4	44	34
08	30	04	70	0309	0135	C4	F5	44	35

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
08	31	04	71	0310	0136	C4	F6	44	36
08	32	04	72	0311	0137	C4	F7	44	37
08	33	04	73	0312	0138	C4	F8	44	38
08	34	04	74	0313	0139	C4	F9	44	39
08	35	04	75	0314	013A	C4	7A	44	3A
08	36	04	76	0315	013B	C4	7B	44	23
08	37	04	77	0316	013C	C4	7C	44	40
08	38	04	78	0317	013D	C4	7D	44	27
08	39	04	79	0318	013E	C4	7E	44	3D
08	40	04	80	0319	013F	C4	7F	44	22
09	01	05	01	0320	0140	C5	40	45	20
09	02	05	02	0321	0141	C5	C1	45	41
09	03	05	03	0322	0142	C5	C2	45	42
09	04	05	04	0323	0143	C5	C3	45	43
09	05	05	05	0324	0144	C5	C4	45	44
09	06	05	06	0325	0145	C5	C5	45	45
09	07	05	07	0326	0146	C5	C6	45	46
09	08	05	08	0327	0147	C5	C7	45	47
09	09	05	09	0328	0148	C5	C8	45	48
09	10	05	10	0329	0149	C5	C9	45	49
09	11	05	11	0330	014A	C5	4A	45	5B
09	12	05	12	0331	014B	C5	4B	45	2E
09	13	05	13	0332	014C	C5	4C	45	3C
09	14	05	14	0333	014D	C5	4D	45	28
09	15	05	15	0334	014E	C5	4E	45	2B
09	16	05	16	0335	014F	C5	4F	45	21
09	17	05	17	0336	0150	C5	50	45	26
09	18	05	18	0337	0151	C5	D1	45	4A
09	19	05	19	0338	0152	C5	D2	45	4B
09	20	05	20	0339	0153	C5	D3	45	4C
09	21	05	21	0340	0154	C5	D4	45	4D
09	22	05	22	0341	0155	C5	D5	45	4E
09	23	05	23	0342	0156	C5	D6	45	4F
09	24	05	24	0343	0157	C5	D7	45	50
09	25	05	25	0344	0158	C5	D8	45	51
09	26	05	26	0345	0159	C5	D9	45	52
09	27	05	27	0346	015A	C5	5A	45	5D
09	28	05	28	0347	015B	C5	5B	45	24
09	29	05	29	0348	015C	C5	5C	45	2A
09	30	05	30	0349	015D	C5	5D	45	29
09	31	05	31	0350	015E	C5	5E	45	3B
09	32	05	32	0351	015F	C5	5F	45	5E
09	33	05	33	0352	0160	C5	60	45	2D
09	34	05	34	0353	0161	C5	61	45	2F
09	35	05	35	0354	0162	C5	E2	45	53
09	36	05	36	0355	0163	C5	E3	45	54
09	37	05	37	0356	0164	C5	E4	45	55
09	38	05	38	0357	0165	C5	E5	45	56
09	39	05	39	0358	0166	C5	E6	45	57
09	40	05	40	0359	0167	C5	E7	45	58
10	01	05	41	0360	0168	C5	E8	45	59
10	02	05	42	0361	0169	C5	E9	45	5A
10	03	05	43	0362	016A	C5	6A	45	7C
10	04	05	44	0363	016B	C5	6B	45	2C
10	05	05	45	0364	016C	C5	6C	45	25
10	06	05	46	0365	016D	C5	6D	45	5F
10	07	05	47	0366	016E	C5	6E	45	3E
10	08	05	48	0367	016F	C5	6F	45	3F
10	09	05	49	0368	0170	C5	F0	45	30
10	10	05	50	0369	0171	C5	F1	45	31
10	11	05	51	0370	0172	C5	F2	45	32
10	12	05	52	0371	0173	C5	F3	45	33

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
10	13	05	53	0372	0174	C5	F4	45	34
10	14	05	54	0373	0175	C5	F5	45	35
10	15	05	55	0374	0176	C5	F6	45	36
10	16	05	56	0375	0177	C5	F7	45	37
10	17	05	57	0376	0178	C5	F8	45	38
10	18	05	58	0377	0179	C5	F9	45	39
10	19	05	59	0378	017A	C5	7A	45	3A
10	20	05	60	0379	017B	C5	7B	45	23
10	21	05	61	0380	017C	C5	7C	45	40
10	22	05	62	0381	017D	C5	7D	45	27
10	23	05	63	0382	017E	C5	7E	45	3D
10	24	05	64	0383	017F	C5	7F	45	22
10	25	05	65	0384	0180	C6	40	46	20
10	26	05	66	0385	0181	C6	C1	46	41
10	27	05	67	0386	0182	C6	C2	46	42
10	28	05	68	0387	0183	C6	C3	46	43
10	29	05	69	0388	0184	C6	C4	46	44
10	30	05	70	0389	0185	C6	C5	46	45
10	31	05	71	0390	0186	C6	C6	46	46
10	32	05	72	0391	0187	C6	C7	46	47
10	33	05	73	0392	0188	C6	C8	46	48
10	34	05	74	0393	0189	C6	C9	46	49
10	35	05	75	0394	018A	C6	4A	46	5B
10	36	05	76	0395	018B	C6	4B	46	2E
10	37	05	77	0396	018C	C6	4C	46	3C
10	38	05	78	0397	018D	C6	4D	46	28
10	39	05	79	0398	018E	C6	4E	46	2B
10	40	05	80	0399	018F	C6	4F	46	21
11	01	06	01	0400	0190	C6	50	46	26
11	02	06	02	0401	0191	C6	D1	46	4A
11	03	06	03	0402	0192	C6	D2	46	4B
11	04	06	04	0403	0193	C6	D3	46	4C
11	05	06	05	0404	0194	C6	D4	46	4D
11	06	06	06	0405	0195	C6	D5	46	4E
11	07	06	07	0406	0196	C6	D6	46	4F
11	08	06	08	0407	0197	C6	D7	46	50
11	09	06	09	0408	0198	C6	D8	46	51
11	10	06	10	0409	0199	C6	D9	46	52
11	11	06	11	0410	019A	C6	5A	46	5D
11	12	06	12	0411	019B	C6	5B	46	24
11	13	06	13	0412	019C	C6	5C	46	2A
11	14	06	14	0413	019D	C6	5D	46	29
11	15	06	15	0414	019E	C6	5E	46	3B
11	16	06	16	0415	019F	C6	5F	46	5E
11	17	06	17	0416	01A0	C6	60	46	2D
11	18	06	18	0417	01A1	C6	61	46	2F
11	19	06	19	0418	01A2	C6	E2	46	53
11	20	06	20	0419	01A3	C6	E3	46	54
11	21	06	21	0420	01A4	C6	E4	46	55
11	22	06	22	0421	01A5	C6	E5	46	56
11	23	06	23	0422	01A6	C6	E6	46	57
11	24	06	24	0423	01A7	C6	E7	46	58
11	25	06	25	0424	01A8	C6	E8	46	59
11	26	06	26	0425	01A9	C6	E9	46	5A
11	27	06	27	0426	01AA	C6	6A	46	7C
11	28	06	28	0427	01AB	C6	6B	46	2C
11	29	06	29	0428	01AC	C6	6C	46	25
11	30	06	30	0429	01AD	C6	6D	46	5F
11	31	06	31	0430	01AE	C6	6E	46	3E
11	32	06	32	0431	01AF	C6	6F	46	3F
11	33	06	33	0432	01B0	C6	F0	46	30
11	34	06	34	0433	01B1	C6	F1	46	31

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC	ASCII		
11	35	06	35	0434	01B2	C6	F2	46	32
11	36	06	36	0435	01B3	C6	F3	46	33
11	37	06	37	0436	01B4	C6	F4	46	34
11	38	06	38	0437	01B5	C6	F5	46	35
11	39	06	39	0438	01B6	C6	F6	46	36
11	40	06	40	0439	01B7	C6	F7	46	37
12	01	06	41	0440	01B8	C6	F8	46	38
12	02	06	42	0441	01B9	C6	F9	46	39
12	03	06	43	0442	01BA	C6	7A	46	3A
12	04	06	44	0443	01BB	C6	7B	46	23
12	05	06	45	0444	01BC	C6	7C	46	40
12	06	06	46	0445	01BD	C6	7D	46	27
12	07	06	47	0446	01BE	C6	7E	46	3D
12	08	06	48	0447	01BF	C6	7F	46	22
12	09	06	49	0448	01C0	C7	40	47	20
12	10	06	50	0449	01C1	C7	C1	47	41
12	11	06	51	0450	01C2	C7	C2	47	42
12	12	06	52	0451	01C3	C7	C3	47	43
12	13	06	53	0452	01C4	C7	C4	47	44
12	14	06	54	0453	01C5	C7	C5	47	45
12	15	06	55	0454	01C6	C7	C6	47	46
12	16	06	56	0455	01C7	C7	C7	47	47
12	17	06	57	0456	01C8	C7	C8	47	48
12	18	06	58	0457	01C9	C7	C9	47	49
12	19	06	59	0458	01CA	C7	4A	47	5B
12	20	06	60	0459	01CB	C7	4B	47	2E
12	21	06	61	0460	01CC	C7	4C	47	3C
12	22	06	62	0461	01CD	C7	4D	47	28
12	23	06	63	0462	01CE	C7	4E	47	2B
12	24	06	64	0463	01CF	C7	4F	47	21
12	25	06	65	0464	01D0	C7	50	47	26
12	26	06	66	0465	01D1	C7	D1	47	4A
12	27	06	67	0466	01D2	C7	D2	47	4B
12	28	06	68	0467	01D3	C7	D3	47	4C
12	29	06	69	0468	01D4	C7	D4	47	4D
12	30	06	70	0469	01D5	C7	D5	47	4E
12	31	06	71	0470	01D6	C7	D6	47	4F
12	32	06	72	0471	01D7	C7	D7	47	50
12	33	06	73	0472	01D8	C7	D8	47	51
12	34	06	74	0473	01D9	C7	D9	47	52
12	35	06	75	0474	01DA	C7	5A	47	5D
12	36	06	76	0475	01DB	C7	5B	47	24
12	37	06	77	0476	01DC	C7	5C	47	2A
12	38	06	78	0477	01DD	C7	5D	47	29
12	39	06	79	0478	01DE	C7	5E	47	3B
12	40	06	80	0479	01DF	C7	5F	47	5E
		07	01	0480	01E0	C7	60	47	2D
		07	02	0481	01E1	C7	61	47	2F
		07	03	0482	01E2	C7	E2	47	53
		07	04	0483	01E3	C7	E3	47	54
		07	05	0484	01E4	C7	E4	47	55
		07	06	0485	01E5	C7	E5	47	56
		07	07	0486	01E6	C7	E6	47	57
		07	08	0487	01E7	C7	E7	47	58
		07	09	0488	01E8	C7	E8	47	59
		07	10	0489	01E9	C7	E9	47	5A
		07	11	0490	01EA	C7	6A	47	7C
		07	12	0491	01EB	C7	6B	47	2C
		07	13	0492	01EC	C7	6C	47	25
		07	14	0493	01ED	C7	6D	47	5F
		07	15	0494	01EE	C7	6E	47	3E
		07	16	0495	01EF	C7	6F	47	3F

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
07	17			0496	01F0	C7	F0	47	30
07	18			0497	01F1	C7	F1	47	31
07	19			0498	01F2	C7	F2	47	32
07	20			0499	01F3	C7	F3	47	33
07	21			0500	01F4	C7	F4	47	34
07	22			0501	01F5	C7	F5	47	35
07	23			0502	01F6	C7	F6	47	36
07	24			0503	01F7	C7	F7	47	37
07	25			0504	01F8	C7	F8	47	38
07	26			0505	01F9	C7	F9	47	39
07	27			0506	01FA	C7	7A	47	3A
07	28			0507	01FB	C7	7B	47	23
07	29			0508	01FC	C7	7C	47	40
07	30			0509	01FD	C7	7D	47	27
07	31			0510	01FE	C7	7E	47	3D
07	32			0511	01FF	C7	7F	47	22
07	33			0512	0200	C8	40	48	20
07	34			0513	0201	C8	C1	48	41
07	35			0514	0202	C8	C2	48	42
07	36			0515	0203	C8	C3	48	43
07	37			0516	0204	C8	C4	48	44
07	38			0517	0205	C8	C5	48	45
07	39			0518	0206	C8	C6	48	46
07	40			0519	0207	C8	C7	48	47
07	41			0520	0208	C8	C8	48	48
07	42			0521	0209	C8	C9	48	49
07	43			0522	020A	C8	4A	48	5B
07	44			0523	020B	C8	4B	48	2E
07	45			0524	020C	C8	4C	48	3C
07	46			0525	020D	C8	4D	48	28
07	47			0526	020E	C8	4E	48	2B
07	48			0527	020F	C8	4F	48	21
07	49			0528	0210	C8	50	48	26
07	50			0529	0211	C8	D1	48	4A
07	51			0530	0212	C8	D2	48	4B
07	52			0531	0213	C8	D3	48	4C
07	53			0532	0214	C8	D4	48	4D
07	54			0533	0215	C8	D5	48	4E
07	55			0534	0216	C8	D6	48	4F
07	56			0535	0217	C8	D7	48	50
07	57			0536	0218	C8	D8	48	51
07	58			0537	0219	C8	D9	48	52
07	59			0538	021A	C8	5A	48	5D
07	60			0539	021B	C8	5B	48	24
07	61			0540	021C	C8	5C	48	2A
07	62			0541	021D	C8	5D	48	29
07	63			0542	021E	C8	5E	48	3B
07	64			0543	021F	C8	5F	48	5E
07	65			0544	0220	C8	60	48	2D
07	66			0545	0221	C8	61	48	2F
07	67			0546	0222	C8	E2	48	53
07	68			0547	0223	C8	E3	48	54
07	69			0548	0224	C8	E4	48	55
07	70			0549	0225	C8	E5	48	56
07	71			0550	0226	C8	E6	48	57
07	72			0551	0227	C8	E7	48	58
07	73			0552	0228	C8	E8	48	59
07	74			0553	0229	C8	E9	48	5A
07	75			0554	022A	C8	6A	48	7C
07	76			0555	022B	C8	6B	48	2C
07	77			0556	022C	C8	6C	48	25
07	78			0557	022D	C8	6D	48	5F

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
07	79			0558	022E	C8	6E	48	3E
07	80			0559	022F	C8	6F	48	3F
08	01			0560	0230	C8	F0	48	30
08	02			0561	0231	C8	F1	48	31
08	03			0562	0232	C8	F2	48	32
08	04			0563	0233	C8	F3	48	33
08	05			0564	0234	C8	F4	48	34
08	06			0565	0235	C8	F5	48	35
08	07			0566	0236	C8	F6	48	36
08	08			0567	0237	C8	F7	48	37
08	09			0568	0238	C8	F8	48	38
08	10			0569	0239	C8	F9	48	39
08	11			0570	023A	C8	7A	48	3A
08	12			0571	023B	C8	7B	48	23
08	13			0572	023C	C8	7C	48	40
08	14			0573	023D	C8	7D	48	27
08	15			0574	023E	C8	7E	48	3D
08	16			0575	023F	C8	7F	48	22
08	17			0576	0240	C9	40	49	20
08	18			0577	0241	C9	C1	49	41
08	19			0578	0242	C9	C2	49	42
08	20			0579	0243	C9	C3	49	43
08	21			0580	0244	C9	C4	49	44
08	22			0581	0245	C9	C5	49	45
08	23			0582	0246	C9	C6	49	46
08	24			0583	0247	C9	C7	49	47
08	25			0584	0248	C9	C8	49	48
08	26			0585	0249	C9	C9	49	49
08	27			0586	024A	C9	4A	49	5B
08	28			0587	024B	C9	4B	49	2E
08	29			0588	024C	C9	4C	49	3C
08	30			0589	024D	C9	4D	49	28
08	31			0590	024E	C9	4E	49	2B
08	32			0591	024F	C9	4F	49	21
08	33			0592	0250	C9	50	49	26
08	34			0593	0251	C9	D1	49	4A
08	35			0594	0252	C9	D2	49	4B
08	36			0595	0253	C9	D3	49	4C
08	37			0596	0254	C9	D4	49	4D
08	38			0597	0255	C9	D5	49	4E
08	39			0598	0256	C9	D6	49	4F
08	40			0599	0257	C9	D7	49	50
08	41			0600	0258	C9	D8	49	51
08	42			0601	0259	C9	D9	49	52
08	43			0602	025A	C9	5A	49	5D
08	44			0603	025B	C9	5B	49	24
08	45			0604	025C	C9	5C	49	2A
08	46			0605	025D	C9	5D	49	29
08	47			0606	025E	C9	5E	49	3B
08	48			0607	025F	C9	5F	49	5E
08	49			0608	0260	C9	60	49	2D
08	50			0609	0261	C9	61	49	2F
08	51			0610	0262	C9	E2	49	53
08	52			0611	0263	C9	E3	49	54
08	53			0612	0264	C9	E4	49	55
08	54			0613	0265	C9	E5	49	56
08	55			0614	0266	C9	E6	49	57
08	56			0615	0267	C9	E7	49	58
08	57			0616	0268	C9	E8	49	59
08	58			0617	0269	C9	E9	49	5A
08	59			0618	026A	C9	6A	49	7C
08	60			0619	026B	C9	6B	49	2C

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
08	61			0620	026C	C9	6C	49	25
08	62			0621	026D	C9	6D	49	5F
08	63			0622	026E	C9	6E	49	3E
08	64			0623	026F	C9	6F	49	3F
08	65			0624	0270	C9	F0	49	30
08	66			0625	0271	C9	F1	49	31
08	67			0626	0272	C9	F2	49	32
08	68			0627	0273	C9	F3	49	33
08	69			0628	0274	C9	F4	49	34
08	70			0629	0275	C9	F5	49	35
08	71			0630	0276	C9	F6	49	36
08	72			0631	0277	C9	F7	49	37
08	73			0632	0278	C9	F8	49	38
08	74			0633	0279	C9	F9	49	39
08	75			0634	027A	C9	7A	49	3A
08	76			0635	027B	C9	7B	49	23
08	77			0636	027C	C9	7C	49	40
08	78			0637	027D	C9	7D	49	27
08	79			0638	027E	C9	7E	49	3D
08	80			0639	027F	C9	7F	49	22
09	01			0640	0280	4A	40	5B	20
09	02			0641	0281	4A	C1	5B	41
09	03			0642	0282	4A	C2	5B	42
09	04			0643	0283	4A	C3	5B	43
09	05			0644	0284	4A	C4	5B	44
09	06			0645	0285	4A	C5	5B	45
09	07			0646	0286	4A	C6	5B	46
09	08			0647	0287	4A	C7	5B	47
09	09			0648	0288	4A	C8	5B	48
09	10			0649	0289	4A	C9	5B	49
09	11			0650	028A	4A	4A	5B	5B
09	12			0651	028B	4A	4B	5B	2E
09	13			0652	028C	4A	4C	5B	3C
09	14			0653	028D	4A	4D	5B	28
09	15			0654	028E	4A	4E	5B	2B
09	16			0655	028F	4A	4F	5B	21
09	17			0656	0290	4A	50	5B	26
09	18			0657	0291	4A	D1	5B	4A
09	19			0658	0292	4A	D2	5B	4B
09	20			0659	0293	4A	D3	5B	4C
09	21			0660	0294	4A	D4	5B	4D
09	22			0661	0295	4A	D5	5B	4E
09	23			0662	0296	4A	D6	5B	4F
09	24			0663	0297	4A	D7	5B	50
09	25			0664	0298	4A	D8	5B	51
09	26			0665	0299	4A	D9	5B	52
09	27			0666	029A	4A	5A	5B	5D
09	28			0667	029B	4A	5B	5B	24
09	29			0668	029C	4A	5C	5B	2A
09	30			0669	029D	4A	5D	5B	29
09	31			0670	029E	4A	5E	5B	3B
09	32			0671	029F	4A	5F	5B	5E
09	33			0672	02A0	4A	60	5B	2D
09	34			0673	02A1	4A	61	5B	2F
09	35			0674	02A2	4A	E2	5B	53
09	36			0675	02A3	4A	E3	5B	54
09	37			0676	02A4	4A	E4	5B	55
09	38			0677	02A5	4A	E5	5B	56
09	39			0678	02A6	4A	E6	5B	57
09	40			0679	02A7	4A	E7	5B	58
09	41			0680	02A8	4A	E8	5B	59
09	42			0681	02A9	4A	E9	5B	5A

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
09	43			0682	02AA	4A	6A	5B	7C
09	44			0683	02AB	4A	6B	5B	2C
09	45			0684	02AC	4A	6C	5B	25
09	46			0685	02AD	4A	6D	5B	5F
09	47			0686	02AE	4A	6E	5B	3E
09	48			0687	02AF	4A	6F	5B	3F
09	49			0688	02B0	4A	F0	5B	30
09	50			0689	02B1	4A	F1	5B	31
09	51			0690	02B2	4A	F2	5B	32
09	52			0691	02B3	4A	F3	5B	33
09	53			0692	02B4	4A	F4	5B	34
09	54			0693	02B5	4A	F5	5B	35
09	55			0694	02B6	4A	F6	5B	36
09	56			0695	02B7	4A	F7	5B	37
09	57			0696	02B8	4A	F8	5B	38
09	58			0697	02B9	4A	F9	5B	39
09	59			0698	02BA	4A	7A	5B	3A
09	60			0699	02BB	4A	7B	5B	23
09	61			0700	02BC	4A	7C	5B	40
09	62			0701	02BD	4A	7D	5B	27
09	63			0702	02BE	4A	7E	5B	3D
09	64			0703	02BF	4A	7F	5B	22
09	65			0704	02C0	4B	40	2E	20
09	66			0705	02C1	4B	C1	2E	41
09	67			0706	02C2	4B	C2	2E	42
09	68			0707	02C3	4B	C3	2E	43
09	69			0708	02C4	4B	C4	2E	44
09	70			0709	02C5	4B	C5	2E	45
09	71			0710	02C6	4B	C6	2E	46
09	72			0711	02C7	4B	C7	2E	47
09	73			0712	02C8	4B	C8	2E	48
09	74			0713	02C9	4B	C9	2E	49
09	75			0714	02CA	4B	4A	2E	5B
09	76			0715	02CB	4B	4B	2E	2E
09	77			0716	02CC	4B	4C	2E	3C
09	78			0717	02CD	4B	4D	2E	28
09	79			0718	02CE	4B	4E	2E	2B
09	80			0719	02CF	4B	4F	2E	21
10	01			0720	02D0	4B	50	2E	26
10	02			0721	02D1	4B	D1	2E	4A
10	03			0722	02D2	4B	D2	2E	4B
10	04			0723	02D3	4B	D3	2E	4C
10	05			0724	02D4	4B	D4	2E	4D
10	06			0725	02D5	4B	D5	2E	4E
10	07			0726	02D6	4B	D6	2E	4F
10	08			0727	02D7	4B	D7	2E	50
10	09			0728	02D8	4B	D8	2E	51
10	10			0729	02D9	4B	D9	2E	52
10	11			0730	02DA	4B	5A	2E	5D
10	12			0731	02DB	4B	5B	2E	24
10	13			0732	02DC	4B	5C	2E	2A
10	14			0733	02DD	4B	5D	2E	29
10	15			0734	02DE	4B	5E	2E	3B
10	16			0735	02DF	4B	5F	2E	5E
10	17			0736	02E0	4B	60	2E	2D
10	18			0737	02E1	4B	61	2E	2F
10	19			0738	02E2	4B	E2	2E	53
10	20			0739	02E3	4B	E3	2E	54
10	21			0740	02E4	4B	E4	2E	55
10	22			0741	02E5	4B	E5	2E	56
10	23			0742	02E6	4B	E6	2E	57
10	24			0743	02E7	4B	E7	2E	58

Mod 1	R C	Mods 2,3,4		Position		Buffer Address (Hex)			
		R	C	Dec	Hex	EBCDIC		ASCII	
		10	25	0744	02E8	4B	E8	2E	59
		10	26	0745	02E9	4B	E9	2E	5A
		10	27	0746	02EA	4B	6A	2E	7C
		10	28	0747	02EB	4B	6B	2E	2C
		10	29	0748	02EC	4B	6C	2E	25
		10	30	0749	02ED	4B	6D	2E	5F
		10	31	0750	02EE	4B	6E	2E	3E
		10	32	0751	02EF	4B	6F	2E	3F
		10	33	0752	02F0	4B	F0	2E	30
		10	34	0753	02F1	4B	F1	2E	31
		10	35	0754	02F2	4B	F2	2E	32
		10	36	0755	02F3	4B	F3	2E	33
		10	37	0756	02F4	4B	F4	2E	34
		10	38	0757	02F5	4B	F5	2E	35
		10	39	0758	02F6	4B	F6	2E	36
		10	40	0759	02F7	4B	F7	2E	37
		10	41	0760	02F8	4B	F8	2E	38
		10	42	0761	02F9	4B	F9	2E	39
		10	43	0762	02FA	4B	7A	2E	3A
		10	44	0763	02FB	4B	7B	2E	23
		10	45	0764	02FC	4B	7C	2E	40
		10	46	0765	02FD	4B	7D	2E	27
		10	47	0766	02FE	4B	7E	2E	3D
		10	48	0767	02FF	4B	7F	2E	22
		10	49	0768	0300	4C	40	3C	20
		10	50	0769	0301	4C	C1	3C	41
		10	51	0770	0302	4C	C2	3C	42
		10	52	0771	0303	4C	C3	3C	43
		10	53	0772	0304	4C	C4	3C	44
		10	54	0773	0305	4C	C5	3C	45
		10	55	0774	0306	4C	C6	3C	46
		10	56	0775	0307	4C	C7	3C	47
		10	57	0776	0308	4C	C8	3C	48
		10	58	0777	0309	4C	C9	3C	49
		10	59	0778	030A	4C	4A	3C	5B
		10	60	0779	030B	4C	4B	3C	2E
		10	61	0780	030C	4C	4C	3C	3C
		10	62	0781	030D	4C	4D	3C	28
		10	63	0782	030E	4C	4E	3C	2B
		10	64	0783	030F	4C	4F	3C	21
		10	65	0784	0310	4C	50	3C	26
		10	66	0785	0311	4C	D1	3C	4A
		10	67	0786	0312	4C	D2	3C	4B
		10	68	0787	0313	4C	D3	3C	4C
		10	69	0788	0314	4C	D4	3C	4D
		10	70	0789	0315	4C	D5	3C	4E
		10	71	0790	0316	4C	D6	3C	4F
		10	72	0791	0317	4C	D7	3C	50
		10	73	0792	0318	4C	D8	3C	51
		10	74	0793	0319	4C	D9	3C	52
		10	75	0794	031A	4C	5A	3C	5D
		10	76	0795	031B	4C	5B	3C	24
		10	77	0796	031C	4C	5C	3C	2A
		10	78	0797	031D	4C	5D	3C	29
		10	79	0798	031E	4C	5E	3C	3B
		10	80	0799	031F	4C	5F	3C	5E
		11	01	0800	0320	4C	60	3C	2D
		11	02	0801	0321	4C	61	3C	2F
		11	03	0802	0322	4C	E2	3C	53
		11	04	0803	0323	4C	E3	3C	54
		11	05	0804	0324	4C	E4	3C	55
		11	06	0805	0325	4C	E5	3C	56

Mod 1	R C	Mods 2,3,4		Position		Buffer Address (Hex)			
		R	C	Dec	Hex	EBCDIC		ASCII	
		11	07	0806	0326	4C	E6	3C	57
		11	08	0807	0327	4C	E7	3C	58
		11	09	0808	0328	4C	E8	3C	59
		11	10	0809	0329	4C	E9	3C	5A
		11	11	0810	032A	4C	6A	3C	7C
		11	12	0811	032B	4C	6B	3C	2C
		11	13	0812	032C	4C	6C	3C	25
		11	14	0813	032D	4C	6D	3C	5F
		11	15	0814	032E	4C	6E	3C	3E
		11	16	0815	032F	4C	6F	3C	3F
		11	17	0816	0330	4C	F0	3C	30
		11	18	0817	0331	4C	F1	3C	31
		11	19	0818	0332	4C	F2	3C	32
		11	20	0819	0333	4C	F3	3C	33
		11	21	0820	0334	4C	F4	3C	34
		11	22	0821	0335	4C	F5	3C	35
		11	23	0822	0336	4C	F6	3C	36
		11	24	0823	0337	4C	F7	3C	37
		11	25	0824	0338	4C	F8	3C	38
		11	26	0825	0339	4C	F9	3C	39
		11	27	0826	033A	4C	7A	3C	3A
		11	28	0827	033B	4C	7B	3C	23
		11	29	0828	033C	4C	7C	3C	40
		11	30	0829	033D	4C	7D	3C	27
		11	31	0830	033E	4C	7E	3C	3D
		11	32	0831	033F	4C	7F	3C	22
		11	33	0832	0340	4D	40	28	20
		11	34	0833	0341	4D	C1	28	41
		11	35	0834	0342	4D	C2	28	42
		11	36	0835	0343	4D	C3	28	43
		11	37	0836	0344	4D	C4	28	44
		11	38	0837	0345	4D	C5	28	45
		11	39	0838	0346	4D	C6	28	46
		11	40	0839	0347	4D	C7	28	47
		11	41	0840	0348	4D	C8	28	48
		11	42	0841	0349	4D	C9	28	49
		11	43	0842	034A	4D	4A	28	5B
		11	44	0843	034B	4D	4B	28	2E
		11	45	0844	034C	4D	4C	28	3C
		11	46	0845	034D	4D	4D	28	28
		11	47	0846	034E	4D	4E	28	2B
		11	48	0847	034F	4D	4F	28	21
		11	49	0848	0350	4D	50	28	26
		11	50	0849	0351	4D	D1	28	4A
		11	51	0850	0352	4D	D2	28	4B
		11	52	0851	0353	4D	D3	28	4C
		11	53	0852	0354	4D	D4	28	4D
		11	54	0853	0355	4D	D5	28	4E
		11	55	0854	0356	4D	D6	28	4F
		11	56	0855	0357	4D	D7	28	50
		11	57	0856	0358	4D	D8	28	51
		11	58	0857	0359	4D	D9	28	52
		11	59	0858	035A	4D	5A	28	5D
		11	60	0859	035B	4D	5B	28	24
		11	61	0860	035C	4D	5C	28	2A
		11	62	0861	035D	4D	5D	28	29
		11	63	0862	035E	4D	5E	28	3B
		11	64	0863	035F	4D	5F	28	5E
		11	65	0864	0360	4D	60	28	2D
		11	66	0865	0361	4D	61	28	2F
		11	67	0866	0362	4D	E2	28	53
		11	68	0867	0363	4D	E3	28	54

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC		ASCII	
11	69		0868	0364	4D	E4	28	55
11	70		0869	0365	4D	E5	28	56
11	71		0870	0366	4D	E6	28	57
11	72		0871	0367	4D	E7	28	58
11	73		0872	0368	4D	E8	28	59
11	74		0873	0369	4D	E9	28	5A
11	75		0874	036A	4D	6A	28	7C
11	76		0875	036B	4D	6B	28	2C
11	77		0876	036C	4D	6C	28	25
11	78		0877	036D	4D	6D	28	5F
11	79		0878	036E	4D	6E	28	3E
11	80		0879	036F	4D	6F	28	3F
12	01		0880	0370	4D	F0	28	30
12	02		0881	0371	4D	F1	28	31
12	03		0882	0372	4D	F2	28	32
12	04		0883	0373	4D	F3	28	33
12	05		0884	0374	4D	F4	28	34
12	06		0885	0375	4D	F5	28	35
12	07		0886	0376	4D	F6	28	36
12	08		0887	0377	4D	F7	28	37
12	09		0888	0378	4D	F8	28	38
12	10		0889	0379	4D	F9	28	39
12	11		0890	037A	4D	7A	28	3A
12	12		0891	037B	4D	7B	28	23
12	13		0892	037C	4D	7C	28	40
12	14		0893	037D	4D	7D	28	27
12	15		0894	037E	4D	7E	28	3D
12	16		0895	037F	4D	7F	28	22
12	17		0896	0380	4E	40	2B	20
12	18		0897	0381	4E	C1	2B	41
12	19		0898	0382	4E	C2	2B	42
12	20		0899	0383	4E	C3	2B	43
12	21		0900	0384	4E	C4	2B	44
12	22		0901	0385	4E	C5	2B	45
12	23		0902	0386	4E	C6	2B	46
12	24		0903	0387	4E	C7	2B	47
12	25		0904	0388	4E	C8	2B	48
12	26		0905	0389	4E	C9	2B	49
12	27		0906	038A	4E	4A	2B	5B
12	28		0907	038B	4E	4B	2B	2E
12	29		0908	038C	4E	4C	2B	3C
12	30		0909	038D	4E	4D	2B	28
12	31		0910	038E	4E	4E	2B	2B
12	32		0911	038F	4E	4F	2B	21
12	33		0912	0390	4E	50	2B	26
12	34		0913	0391	4E	D1	2B	4A
12	35		0914	0392	4E	D2	2B	4B
12	36		0915	0393	4E	D3	2B	4C
12	37		0916	0394	4E	D4	2B	4D
12	38		0917	0395	4E	D5	2B	4E
12	39		0918	0396	4E	D6	2B	4F
12	40		0919	0397	4E	D7	2B	50
12	41		0920	0398	4E	D8	2B	51
12	42		0921	0399	4E	D9	2B	52
12	43		0922	039A	4E	5A	2B	5D
12	44		0923	039B	4E	5B	2B	24
12	45		0924	039C	4E	5C	2B	2A
12	46		0925	039D	4E	5D	2B	29
12	47		0926	039E	4E	5E	2B	3B
12	48		0927	039F	4E	5F	2B	5E
12	49		0928	03A0	4E	60	2B	2D
12	50		0929	03A1	4E	61	2B	2F

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
12	51			0930	03A2	4E	E2	2B	53
12	52			0931	03A3	4E	E3	2B	54
12	53			0932	03A4	4E	E4	2B	55
12	54			0933	03A5	4E	E5	2B	56
12	55			0934	03A6	4E	E6	2B	57
12	56			0935	03A7	4E	E7	2B	58
12	57			0936	03A8	4E	E8	2B	59
12	58			0937	03A9	4E	E9	2B	5A
12	59			0938	03AA	4E	6A	2B	7C
12	60			0939	03AB	4E	6B	2B	2C
12	61			0940	03AC	4E	6C	2B	25
12	62			0941	03AD	4E	6D	2B	5F
12	63			0942	03AE	4E	6E	2B	3E
12	64			0943	03AF	4E	6F	2B	3F
12	65			0944	03B0	4E	F0	2B	30
12	66			0945	03B1	4E	F1	2B	31
12	67			0946	03B2	4E	F2	2B	32
12	68			0947	03B3	4E	F3	2B	33
12	69			0948	03B4	4E	F4	2B	34
12	70			0949	03B5	4E	F5	2B	35
12	71			0950	03B6	4E	F6	2B	36
12	72			0951	03B7	4E	F7	2B	37
12	73			0952	03B8	4E	F8	2B	38
12	74			0953	03B9	4E	F9	2B	39
12	75			0954	03BA	4E	7A	2B	3A
12	76			0955	03BB	4E	7B	2B	23
12	77			0956	03BC	4E	7C	2B	40
12	78			0957	03BD	4E	7D	2B	27
12	79			0958	03BE	4E	7E	2B	3D
12	80			0959	03BF	4E	7F	2B	22
13	01			0960	03C0	4F	40	21	20
13	02			0961	03C1	4F	C1	21	41
13	03			0962	03C2	4F	C2	21	42
13	04			0963	03C3	4F	C3	21	43
13	05			0964	03C4	4F	C4	21	44
13	06			0965	03C5	4F	C5	21	45
13	07			0966	03C6	4F	C6	21	46
13	08			0967	03C7	4F	C7	21	47
13	09			0968	03C8	4F	C8	21	48
13	10			0969	03C9	4F	C9	21	49
13	11			0970	03CA	4F	4A	21	5B
13	12			0971	03CB	4F	4B	21	2E
13	13			0972	03CC	4F	4C	21	3C
13	14			0973	03CD	4F	4D	21	28
13	15			0974	03CE	4F	4E	21	2B
13	16			0975	03CF	4F	4F	21	21
13	17			0976	03D0	4F	50	21	26
13	18			0977	03D1	4F	D1	21	4A
13	19			0978	03D2	4F	D2	21	4B
13	20			0979	03D3	4F	D3	21	4C
13	21			0980	03D4	4F	D4	21	4D
13	22			0981	03D5	4F	D5	21	4E
13	23			0982	03D6	4F	D6	21	4F
13	24			0983	03D7	4F	D7	21	50
13	25			0984	03D8	4F	D8	21	51
13	26			0985	03D9	4F	D9	21	52
13	27			0986	03DA	4F	5A	21	5D
13	28			0987	03DB	4F	5B	21	24
13	29			0988	03DC	4F	5C	21	2A
13	30			0989	03DD	4F	5D	21	29
13	31			0990	03DE	4F	5E	21	3B
13	32			0991	03DF	4F	5F	21	5E

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
13	33			0992	03E0	4F	60	21	2D
13	34			0993	03E1	4F	61	21	2F
13	35			0994	03E2	4F	E2	21	53
13	36			0995	03E3	4F	E3	21	54
13	37			0996	03E4	4F	E4	21	55
13	38			0997	03E5	4F	E5	21	56
13	39			0998	03E6	4F	E6	21	57
13	40			0999	03E7	4F	E7	21	58
13	41			1000	03E8	4F	E8	21	59
13	42			1001	03E9	4F	E9	21	5A
13	43			1002	03EA	4F	6A	21	7C
13	44			1003	03EB	4F	6B	21	2C
13	45			1004	03EC	4F	6C	21	25
13	46			1005	03ED	4F	6D	21	5F
13	47			1006	03EE	4F	6E	21	3E
13	48			1007	03EF	4F	6F	21	3F
13	49			1008	03F0	4F	F0	21	30
13	50			1009	03F1	4F	F1	21	31
13	51			1010	03F2	4F	F2	21	32
13	52			1011	03F3	4F	F3	21	33
13	53			1012	03F4	4F	F4	21	34
13	54			1013	03F5	4F	F5	21	35
13	55			1014	03F6	4F	F6	21	36
13	56			1015	03F7	4F	F7	21	37
13	57			1016	03F8	4F	F8	21	38
13	58			1017	03F9	4F	F9	21	39
13	59			1018	03FA	4F	7A	21	3A
13	60			1019	03FB	4F	7B	21	23
13	61			1020	03FC	4F	7C	21	40
13	62			1021	03FD	4F	7D	21	27
13	63			1022	03FE	4F	7E	21	3D
13	64			1023	03FF	4F	7F	21	22
13	65			1024	0400	50	40	26	20
13	66			1025	0401	50	C1	26	41
13	67			1026	0402	50	C2	26	42
13	68			1027	0403	50	C3	26	43
13	69			1028	0404	50	C4	26	44
13	70			1029	0405	50	C5	26	45
13	71			1030	0406	50	C6	26	46
13	72			1031	0407	50	C7	26	47
13	73			1032	0408	50	C8	26	48
13	74			1033	0409	50	C9	26	49
13	75			1034	040A	50	4A	26	5B
13	76			1035	040B	50	4B	26	2E
13	77			1036	040C	50	4C	26	3C
13	78			1037	040D	50	4D	26	28
13	79			1038	040E	50	4E	26	2B
13	80			1039	040F	50	4F	26	21
14	01			1040	0410	50	50	26	26
14	02			1041	0411	50	D1	26	4A
14	03			1042	0412	50	D2	26	4B
14	04			1043	0413	50	D3	26	4C
14	05			1044	0414	50	D4	26	4D
14	06			1045	0415	50	D5	26	4E
14	07			1046	0416	50	D6	26	4F
14	08			1047	0417	50	D7	26	50
14	09			1048	0418	50	D8	26	51
14	10			1049	0419	50	D9	26	52
14	11			1050	041A	50	5A	26	5D
14	12			1051	041B	50	5B	26	24
14	13			1052	041C	50	5C	26	2A
14	14			1053	041D	50	5D	26	29

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
14	15			1054	041E	50	5E	26	3B
14	16			1055	041F	50	5F	26	5E
14	17			1056	0420	50	60	26	2D
14	18			1057	0421	50	61	26	2F
14	19			1058	0422	50	E2	26	53
14	20			1059	0423	50	E3	26	54
14	21			1060	0424	50	E4	26	55
14	22			1061	0425	50	E5	26	56
14	23			1062	0426	50	E6	26	57
14	24			1063	0427	50	E7	26	58
14	25			1064	0428	50	E8	26	59
14	26			1065	0429	50	E9	26	5A
14	27			1066	042A	50	6A	26	7C
14	28			1067	042B	50	6B	26	2C
14	29			1068	042C	50	6C	26	25
14	30			1069	042D	50	6D	26	5F
14	31			1070	042E	50	6E	26	3E
14	32			1071	042F	50	6F	26	3F
14	33			1072	0430	50	F0	26	30
14	34			1073	0431	50	F1	26	31
14	35			1074	0432	50	F2	26	32
14	36			1075	0433	50	F3	26	33
14	37			1076	0434	50	F4	26	34
14	38			1077	0435	50	F5	26	35
14	39			1078	0436	50	F6	26	36
14	40			1079	0437	50	F7	26	37
14	41			1080	0438	50	F8	26	38
14	42			1081	0439	50	F9	26	39
14	43			1082	043A	50	7A	26	3A
14	44			1083	043B	50	7B	26	23
14	45			1084	043C	50	7C	26	40
14	46			1085	043D	50	7D	26	27
14	47			1086	043E	50	7E	26	3D
14	48			1087	043F	50	7F	26	22
14	49			1088	0440	D1	40	4A	20
14	50			1089	0441	D1	C1	4A	41
14	51			1090	0442	D1	C2	4A	42
14	52			1091	0443	D1	C3	4A	43
14	53			1092	0444	D1	C4	4A	44
14	54			1093	0445	D1	C5	4A	45
14	55			1094	0446	D1	C6	4A	46
14	56			1095	0447	D1	C7	4A	47
14	57			1096	0448	D1	C8	4A	48
14	58			1097	0449	D1	C9	4A	49
14	59			1098	044A	D1	4A	4A	5B
14	60			1099	044B	D1	4B	4A	2E
14	61			1100	044C	D1	4C	4A	3C
14	62			1101	044D	D1	4D	4A	28
14	63			1102	044E	D1	4E	4A	2B
14	64			1103	044F	D1	4F	4A	21
14	65			1104	0450	D1	50	4A	26
14	66			1105	0451	D1	D1	4A	4A
14	67			1106	0452	D1	D2	4A	4B
14	68			1107	0453	D1	D3	4A	4C
14	69			1108	0454	D1	D4	4A	4D
14	70			1109	0455	D1	D5	4A	4E
14	71			1110	0456	D1	D6	4A	4F
14	72			1111	0457	D1	D7	4A	50
14	73			1112	0458	D1	D8	4A	51
14	74			1113	0459	D1	D9	4A	52
14	75			1114	045A	D1	5A	4A	5D
14	76			1115	045B	D1	5B	4A	24

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
14	77			1116	045C	D1	5C	4A	2A
14	78			1117	045D	D1	5D	4A	29
14	79			1118	045E	D1	5E	4A	3B
14	80			1119	045F	D1	5F	4A	5E
15	01			1120	0460	D1	60	4A	2D
15	02			1121	0461	D1	61	4A	2F
15	03			1122	0462	D1	E2	4A	53
15	04			1123	0463	D1	E3	4A	54
15	05			1124	0464	D1	E4	4A	55
15	06			1125	0465	D1	E5	4A	56
15	07			1126	0466	D1	E6	4A	57
15	08			1127	0467	D1	E7	4A	58
15	09			1128	0468	D1	E8	4A	59
15	10			1129	0469	D1	E9	4A	5A
15	11			1130	046A	D1	6A	4A	7C
15	12			1131	046B	D1	6B	4A	2C
15	13			1132	046C	D1	6C	4A	25
15	14			1133	046D	D1	6D	4A	5F
15	15			1134	046E	D1	6E	4A	3E
15	16			1135	046F	D1	6F	4A	3F
15	17			1136	0470	D1	F0	4A	30
15	18			1137	0471	D1	F1	4A	31
15	19			1138	0472	D1	F2	4A	32
15	20			1139	0473	D1	F3	4A	33
15	21			1140	0474	D1	F4	4A	34
15	22			1141	0475	D1	F5	4A	35
15	23			1142	0476	D1	F6	4A	36
15	24			1143	0477	D1	F7	4A	37
15	25			1144	0478	D1	F8	4A	38
15	26			1145	0479	D1	F9	4A	39
15	27			1146	047A	D1	7A	4A	3A
15	28			1147	047B	D1	7B	4A	23
15	29			1148	047C	D1	7C	4A	40
15	30			1149	047D	D1	7D	4A	27
15	31			1150	047E	D1	7E	4A	3D
15	32			1151	047F	D1	7F	4A	22
15	33			1152	0480	D2	40	4B	20
15	34			1153	0481	D2	C1	4B	41
15	35			1154	0482	D2	C2	4B	42
15	36			1155	0483	D2	C3	4B	43
15	37			1156	0484	D2	C4	4B	44
15	38			1157	0485	D2	C5	4B	45
15	39			1158	0486	D2	C6	4B	46
15	40			1159	0487	D2	C7	4B	47
15	41			1160	0488	D2	C8	4B	48
15	42			1161	0489	D2	C9	4B	49
15	43			1162	048A	D2	4A	4B	5B
15	44			1163	048B	D2	4B	4B	2E
15	45			1164	048C	D2	4C	4B	3C
15	46			1165	048D	D2	4D	4B	28
15	47			1166	048E	D2	4E	4B	2B
15	48			1167	048F	D2	4F	4B	21
15	49			1168	0490	D2	50	4B	26
15	50			1169	0491	D2	D1	4B	4A
15	51			1170	0492	D2	D2	4B	4B
15	52			1171	0493	D2	D3	4B	4C
15	53			1172	0494	D2	D4	4B	4D
15	54			1173	0495	D2	D5	4B	4E
15	55			1174	0496	D2	D6	4B	4F
15	56			1175	0497	D2	D7	4B	50
15	57			1176	0498	D2	D8	4B	51
15	58			1177	0499	D2	D9	4B	52

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC	ASCII		
	15	59	1178	049A	D2	5A	4B	5D
	15	60	1179	049B	D2	5B	4B	24
	15	61	1180	049C	D2	5C	4B	2A
	15	62	1181	049D	D2	5D	4B	29
	15	63	1182	049E	D2	5E	4B	3B
	15	64	1183	049F	D2	5F	4B	5E
	15	65	1184	04A0	D2	60	4B	2D
	15	66	1185	04A1	D2	61	4B	2F
	15	67	1186	04A2	D2	E2	4B	53
	15	68	1187	04A3	D2	E3	4B	54
	15	69	1188	04A4	D2	E4	4B	55
	15	70	1189	04A5	D2	E5	4B	56
	15	71	1190	04A6	D2	E6	4B	57
	15	72	1191	04A7	D2	E7	4B	58
	15	73	1192	04A8	D2	E8	4B	59
	15	74	1193	04A9	D2	E9	4B	5A
	15	75	1194	04AA	D2	6A	4B	7C
	15	76	1195	04AB	D2	6B	4B	2C
	15	77	1196	04AC	D2	6C	4B	25
	15	78	1197	04AD	D2	6D	4B	5F
	15	79	1198	04AE	D2	6E	4B	3E
	15	80	1199	04AF	D2	6F	4B	3F
	16	01	1200	04B0	D2	F0	4B	30
	16	02	1201	04B1	D2	F1	4B	31
	16	03	1202	04B2	D2	F2	4B	32
	16	04	1203	04B3	D2	F3	4B	33
	16	05	1204	04B4	D2	F4	4B	34
	16	06	1205	04B5	D2	F5	4B	35
	16	07	1206	04B6	D2	F6	4B	36
	16	08	1207	04B7	D2	F7	4B	37
	16	09	1208	04B8	D2	F8	4B	38
	16	10	1209	04B9	D2	F9	4B	39
	16	11	1210	04BA	D2	7A	4B	3A
	16	12	1211	04BB	D2	7B	4B	23
	16	13	1212	04BC	D2	7C	4B	40
	16	14	1213	04BD	D2	7D	4B	27
	16	15	1214	04BE	D2	7E	4B	3D
	16	16	1215	04BF	D2	7F	4B	22
	16	17	1216	04C0	D3	40	4C	20
	16	18	1217	04C1	D3	C1	4C	41
	16	19	1218	04C2	D3	C2	4C	42
	16	20	1219	04C3	D3	C3	4C	43
	16	21	1220	04C4	D3	C4	4C	44
	16	22	1221	04C5	D3	C5	4C	45
	16	23	1222	04C6	D3	C6	4C	46
	16	24	1223	04C7	D3	C7	4C	47
	16	25	1224	04C8	D3	C8	4C	48
	16	26	1225	04C9	D3	C9	4C	49
	16	27	1226	04CA	D3	4A	4C	5B
	16	28	1227	04CB	D3	4B	4C	2E
	16	29	1228	04CC	D3	4C	4C	3C
	16	30	1229	04CD	D3	4D	4C	28
	16	31	1230	04CE	D3	4E	4C	2B
	16	32	1231	04CF	D3	4F	4C	21
	16	33	1232	04D0	D3	50	4C	26
	16	34	1233	04D1	D3	D1	4C	4A
	16	35	1234	04D2	D3	D2	4C	4B
	16	36	1235	04D3	D3	D3	4C	4C
	16	37	1236	04D4	D3	D4	4C	4D
	16	38	1237	04D5	D3	D5	4C	4E
	16	39	1238	04D6	D3	D6	4C	4F
	16	40	1239	04D7	D3	D7	4C	50

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC	ASCII		
	16	41	1240	04D8	D3	D8	4C	51
	16	42	1241	04D9	D3	D9	4C	52
	16	43	1242	04DA	D3	5A	4C	5D
	16	44	1243	04DB	D3	5B	4C	24
	16	45	1244	04DC	D3	5C	4C	2A
	16	46	1245	04DD	D3	5D	4C	29
	16	47	1246	04DE	D3	5E	4C	3B
	16	48	1247	04DF	D3	5F	4C	5E
	16	49	1248	04E0	D3	60	4C	2D
	16	50	1249	04E1	D3	61	4C	2F
	16	51	1250	04E2	D3	E2	4C	53
	16	52	1251	04E3	D3	E3	4C	54
	16	53	1252	04E4	D3	E4	4C	55
	16	54	1253	04E5	D3	E5	4C	56
	16	55	1254	04E6	D3	E6	4C	57
	16	56	1255	04E7	D3	E7	4C	58
	16	57	1256	04E8	D3	E8	4C	59
	16	58	1257	04E9	D3	E9	4C	5A
	16	59	1258	04EA	D3	6A	4C	7C
	16	60	1259	04EB	D3	6B	4C	2C
	16	61	1260	04EC	D3	6C	4C	25
	16	62	1261	04ED	D3	6D	4C	5F
	16	63	1262	04EE	D3	6E	4C	3E
	16	64	1263	04EF	D3	6F	4C	3F
	16	65	1264	04F0	D3	F0	4C	30
	16	66	1265	04F1	D3	F1	4C	31
	16	67	1266	04F2	D3	F2	4C	32
	16	68	1267	04F3	D3	F3	4C	33
	16	69	1268	04F4	D3	F4	4C	34
	16	70	1269	04F5	D3	F5	4C	35
	16	71	1270	04F6	D3	F6	4C	36
	16	72	1271	04F7	D3	F7	4C	37
	16	73	1272	04F8	D3	F8	4C	38
	16	74	1273	04F9	D3	F9	4C	39
	16	75	1274	04FA	D3	7A	4C	3A
	16	76	1275	04FB	D3	7B	4C	23
	16	77	1276	04FC	D3	7C	4C	40
	16	78	1277	04FD	D3	7D	4C	27
	16	79	1278	04FE	D3	7E	4C	3D
	16	80	1279	04FF	D3	7F	4C	22
	17	01	1280	0500	D4	40	4D	20
	17	02	1281	0501	D4	C1	4D	41
	17	03	1282	0502	D4	C2	4D	42
	17	04	1283	0503	D4	C3	4D	43
	17	05	1284	0504	D4	C4	4D	44
	17	06	1285	0505	D4	C5	4D	45
	17	07	1286	0506	D4	C6	4D	46
	17	08	1287	0507	D4	C7	4D	47
	17	09	1288	0508	D4	C8	4D	48
	17	10	1289	0509	D4	C9	4D	49
	17	11	1290	050A	D4	4A	4D	5B
	17	12	1291	050B	D4	4B	4D	2E
	17	13	1292	050C	D4	4C	4D	3C
	17	14	1293	050D	D4	4D	4D	28
	17	15	1294	050E	D4	4E	4D	2B
	17	16	1295	050F	D4	4F	4D	21
	17	17	1296	0510	D4	50	4D	26
	17	18	1297	0511	D4	D1	4D	4A
	17	19	1298	0512	D4	D2	4D	4B
	17	20	1299	0513	D4	D3	4D	4C
	17	21	1300	0514	D4	D4	4D	4D
	17	22	1301	0515	D4	D5	4D	4E

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
17	23			1302	0516	D4	D6	4D	4F
17	24			1303	0517	D4	D7	4D	50
17	25			1304	0518	D4	D8	4D	51
17	26			1305	0519	D4	D9	4D	52
17	27			1306	051A	D4	5A	4D	5D
17	28			1307	051B	D4	5B	4D	24
17	29			1308	051C	D4	5C	4D	2A
17	30			1309	051D	D4	5D	4D	29
17	31			1310	051E	D4	5E	4D	3B
17	32			1311	051F	D4	5F	4D	5E
17	33			1312	0520	D4	60	4D	2D
17	34			1313	0521	D4	61	4D	2F
17	35			1314	0522	D4	E2	4D	53
17	36			1315	0523	D4	E3	4D	54
17	37			1316	0524	D4	E4	4D	55
17	38			1317	0525	D4	E5	4D	56
17	39			1318	0526	D4	E6	4D	57
17	40			1319	0527	D4	E7	4D	58
17	41			1320	0528	D4	E8	4D	59
17	42			1321	0529	D4	E9	4D	5A
17	43			1322	052A	D4	6A	4D	7C
17	44			1323	052B	D4	6B	4D	2C
17	45			1324	052C	D4	6C	4D	25
17	46			1325	052D	D4	6D	4D	5F
17	47			1326	052E	D4	6E	4D	3E
17	48			1327	052F	D4	6F	4D	3F
17	49			1328	0530	D4	F0	4D	30
17	50			1329	0531	D4	F1	4D	31
17	51			1330	0532	D4	F2	4D	32
17	52			1331	0533	D4	F3	4D	33
17	53			1332	0534	D4	F4	4D	34
17	54			1333	0535	D4	F5	4D	35
17	55			1334	0536	D4	F6	4D	36
17	56			1335	0537	D4	F7	4D	37
17	57			1336	0538	D4	F8	4D	38
17	58			1337	0539	D4	F9	4D	39
17	59			1338	053A	D4	7A	4D	3A
17	60			1339	053B	D4	7B	4D	23
17	61			1340	053C	D4	7C	4D	40
17	62			1341	053D	D4	7D	4D	27
17	63			1342	053E	D4	7E	4D	3D
17	64			1343	053F	D4	7F	4D	22
17	65			1344	0540	D5	40	4E	20
17	66			1345	0541	D5	C1	4E	41
17	67			1346	0542	D5	C2	4E	42
17	68			1347	0543	D5	C3	4E	43
17	69			1348	0544	D5	C4	4E	44
17	70			1349	0545	D5	C5	4E	45
17	71			1350	0546	D5	C6	4E	46
17	72			1351	0547	D5	C7	4E	47
17	73			1352	0548	D5	C8	4E	48
17	74			1353	0549	D5	C9	4E	49
17	75			1354	054A	D5	4A	4E	5B
17	76			1355	054B	D5	4B	4E	2E
17	77			1356	054C	D5	4C	4E	3C
17	78			1357	054D	D5	4D	4E	28
17	79			1358	054E	D5	4E	4E	2B
17	80			1359	054F	D5	4F	4E	21
18	01			1360	0550	D5	50	4E	26
18	02			1361	0551	D5	D1	4E	4A
18	03			1362	0552	D5	D2	4E	4B
18	04			1363	0553	D5	D3	4E	4C

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
18	05			1364	0554	D5	D4	4E	4D
18	06			1365	0555	D5	D5	4E	4E
18	07			1366	0556	D5	D6	4E	4F
18	08			1367	0557	D5	D7	4E	50
18	09			1368	0558	D5	D8	4E	51
18	10			1369	0559	D5	D9	4E	52
18	11			1370	055A	D5	5A	4E	5D
18	12			1371	055B	D5	5B	4E	24
18	13			1372	055C	D5	5C	4E	2A
18	14			1373	055D	D5	5D	4E	29
18	15			1374	055E	D5	5E	4E	3B
18	16			1375	055F	D5	5F	4E	5E
18	17			1376	0560	D5	60	4E	2D
18	18			1377	0561	D5	61	4E	2F
18	19			1378	0562	D5	E2	4E	53
18	20			1379	0563	D5	E3	4E	54
18	21			1380	0564	D5	E4	4E	55
18	22			1381	0565	D5	E5	4E	56
18	23			1382	0566	D5	E6	4E	57
18	24			1383	0567	D5	E7	4E	58
18	25			1384	0568	D5	E8	4E	59
18	26			1385	0569	D5	E9	4E	5A
18	27			1386	056A	D5	6A	4E	7C
18	28			1387	056B	D5	6B	4E	2C
18	29			1388	056C	D5	6C	4E	25
18	30			1389	056D	D5	6D	4E	5F
18	31			1390	056E	D5	6E	4E	3E
18	32			1391	056F	D5	6F	4E	3F
18	33			1392	0570	D5	F0	4E	30
18	34			1393	0571	D5	F1	4E	31
18	35			1394	0572	D5	F2	4E	32
18	36			1395	0573	D5	F3	4E	33
18	37			1396	0574	D5	F4	4E	34
18	38			1397	0575	D5	F5	4E	35
18	39			1398	0576	D5	F6	4E	36
18	40			1399	0577	D5	F7	4E	37
18	41			1400	0578	D5	F8	4E	38
18	42			1401	0579	D5	F9	4E	39
18	43			1402	057A	D5	7A	4E	3A
18	44			1403	057B	D5	7B	4E	23
18	45			1404	057C	D5	7C	4E	40
18	46			1405	057D	D5	7D	4E	27
18	47			1406	057E	D5	7E	4E	3D
18	48			1407	057F	D5	7F	4E	22
18	49			1408	0580	D6	40	4F	20
18	50			1409	0581	D6	C1	4F	41
18	51			1410	0582	D6	C2	4F	42
18	52			1411	0583	D6	C3	4F	43
18	53			1412	0584	D6	C4	4F	44
18	54			1413	0585	D6	C5	4F	45
18	55			1414	0586	D6	C6	4F	46
18	56			1415	0587	D6	C7	4F	47
18	57			1416	0588	D6	C8	4F	48
18	58			1417	0589	D6	C9	4F	49
18	59			1418	058A	D6	4A	4F	5B
18	60			1419	058B	D6	4B	4F	2E
18	61			1420	058C	D6	4C	4F	3C
18	62			1421	058D	D6	4D	4F	28
18	63			1422	058E	D6	4E	4F	2B
18	64			1423	058F	D6	4F	4F	21
18	65			1424	0590	D6	50	4F	26
18	66			1425	0591	D6	D1	4F	4A

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC		ASCII	
	18	67	1426	0592	D6	D2	4F	4B
	18	68	1427	0593	D6	D3	4F	4C
	18	69	1428	0594	D6	D4	4F	4D
	18	70	1429	0595	D6	D5	4F	4E
	18	71	1430	0596	D6	D6	4F	4F
	18	72	1431	0597	D6	D7	4F	50
	18	73	1432	0598	D6	D8	4F	51
	18	74	1433	0599	D6	D9	4F	52
	18	75	1434	059A	D6	5A	4F	5D
	18	76	1435	059B	D6	5B	4F	24
	18	77	1436	059C	D6	5C	4F	2A
	18	78	1437	059D	D6	5D	4F	29
	18	79	1438	059E	D6	5E	4F	3B
	18	80	1439	059F	D6	5F	4F	5E
	19	01	1440	05A0	D6	60	4F	2D
	19	02	1441	05A1	D6	61	4F	2F
	19	03	1442	05A2	D6	E2	4F	53
	19	04	1443	05A3	D6	E3	4F	54
	19	05	1444	05A4	D6	E4	4F	55
	19	06	1445	05A5	D6	E5	4F	56
	19	07	1446	05A6	D6	E6	4F	57
	19	08	1447	05A7	D6	E7	4F	58
	19	09	1448	05A8	D6	E8	4F	59
	19	10	1449	05A9	D6	E9	4F	5A
	19	11	1450	05AA	D6	6A	4F	7C
	19	12	1451	05AB	D6	6B	4F	2C
	19	13	1452	05AC	D6	6C	4F	25
	19	14	1453	05AD	D6	6D	4F	5F
	19	15	1454	05AE	D6	6E	4F	3E
	19	16	1455	05AF	D6	6F	4F	3F
	19	17	1456	05B0	D6	F0	4F	30
	19	18	1457	05B1	D6	F1	4F	31
	19	19	1458	05B2	D6	F2	4F	32
	19	20	1459	05B3	D6	F3	4F	33
	19	21	1460	05B4	D6	F4	4F	34
	19	22	1461	05B5	D6	F5	4F	35
	19	23	1462	05B6	D6	F6	4F	36
	19	24	1463	05B7	D6	F7	4F	37
	19	25	1464	05B8	D6	F8	4F	38
	19	26	1465	05B9	D6	F9	4F	39
	19	27	1466	05BA	D6	7A	4F	3A
	19	28	1467	05BB	D6	7B	4F	23
	19	29	1468	05BC	D6	7C	4F	40
	19	30	1469	05BD	D6	7D	4F	27
	19	31	1470	05BE	D6	7E	4F	3D
	19	32	1471	05BF	D6	7F	4F	22
	19	33	1472	05C0	D7	40	50	20
	19	34	1473	05C1	D7	C1	50	41
	19	35	1474	05C2	D7	C2	50	42
	19	36	1475	05C3	D7	C3	50	43
	19	37	1476	05C4	D7	C4	50	44
	19	38	1477	05C5	D7	C5	50	45
	19	39	1478	05C6	D7	C6	50	46
	19	40	1479	05C7	D7	C7	50	47
	19	41	1480	05C8	D7	C8	50	48
	19	42	1481	05C9	D7	C9	50	49
	19	43	1482	05CA	D7	4A	50	5B
	19	44	1483	05CB	D7	4B	50	2E
	19	45	1484	05CC	D7	4C	50	3C
	19	46	1485	05CD	D7	4D	50	28
	19	47	1486	05CE	D7	4E	50	2B
	19	48	1487	05CF	D7	4F	50	21

Mod 1	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC	ASCII		
	19	49	1488	05D0	D7	50	50	26
	19	50	1489	05D1	D7	D1	50	4A
	19	51	1490	05D2	D7	D2	50	4B
	19	52	1491	05D3	D7	D3	50	4C
	19	53	1492	05D4	D7	D4	50	4D
	19	54	1493	05D5	D7	D5	50	4E
	19	55	1494	05D6	D7	D6	50	4F
	19	56	1495	05D7	D7	D7	50	50
	19	57	1496	05D8	D7	D8	50	51
	19	58	1497	05D9	D7	D9	50	52
	19	59	1498	05DA	D7	5A	50	5D
	19	60	1499	05DB	D7	5B	50	24
	19	61	1500	05DC	D7	5C	50	2A
	19	62	1501	05DD	D7	5D	50	29
	19	63	1502	05DE	D7	5E	50	3B
	19	64	1503	05DF	D7	5F	50	5E
	19	65	1504	05E0	D7	60	50	2D
	19	66	1505	05E1	D7	61	50	2F
	19	67	1506	05E2	D7	E2	50	53
	19	68	1507	05E3	D7	E3	50	54
	19	69	1508	05E4	D7	E4	50	55
	19	70	1509	05E5	D7	E5	50	56
	19	71	1510	05E6	D7	E6	50	57
	19	72	1511	05E7	D7	E7	50	58
	19	73	1512	05E8	D7	E8	50	59
	19	74	1513	05E9	D7	E9	50	5A
	19	75	1514	05EA	D7	6A	50	7C
	19	76	1515	05EB	D7	6B	50	2C
	19	77	1516	05EC	D7	6C	50	25
	19	78	1517	05ED	D7	6D	50	5F
	19	79	1518	05EE	D7	6E	50	3E
	19	80	1519	05EF	D7	6F	50	3F
	20	01	1520	05F0	D7	F0	50	30
	20	02	1521	05F1	D7	F1	50	31
	20	03	1522	05F2	D7	F2	50	32
	20	04	1523	05F3	D7	F3	50	33
	20	05	1524	05F4	D7	F4	50	34
	20	06	1525	05F5	D7	F5	50	35
	20	07	1526	05F6	D7	F6	50	36
	20	08	1527	05F7	D7	F7	50	37
	20	09	1528	05F8	D7	F8	50	38
	20	10	1529	05F9	D7	F9	50	39
	20	11	1530	05FA	D7	7A	50	3A
	20	12	1531	05FB	D7	7B	50	23
	20	13	1532	05FC	D7	7C	50	40
	20	14	1533	05FD	D7	7D	50	27
	20	15	1534	05FE	D7	7E	50	3D
	20	16	1535	05FF	D7	7F	50	22
	20	17	1536	0600	D8	40	51	20
	20	18	1537	0601	D8	C1	51	41
	20	19	1538	0602	D8	C2	51	42
	20	20	1539	0603	D8	C3	51	43
	20	21	1540	0604	D8	C4	51	44
	20	22	1541	0605	D8	C5	51	45
	20	23	1542	0606	D8	C6	51	46
	20	24	1543	0607	D8	C7	51	47
	20	25	1544	0608	D8	C8	51	48
	20	26	1545	0609	D8	C9	51	49
	20	27	1546	060A	D8	4A	51	5B
	20	28	1547	060B	D8	4B	51	2E
	20	29	1548	060C	D8	4C	51	3C
	20	30	1549	060D	D8	4D	51	28

Mod 1 <u>R C</u>	Mods 2,3,4 <u>R C</u>	Position		Buffer Address (Hex)			
		<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
	20 31	1550	060E	D8	4E	51	2B
	20 32	1551	060F	D8	4F	51	21
	20 33	1552	0610	D8	50	51	26
	20 34	1553	0611	D8	D1	51	4A
	20 35	1554	0612	D8	D2	51	4B
	20 36	1555	0613	D8	D3	51	4C
	20 37	1556	0614	D8	D4	51	4D
	20 38	1557	0615	D8	D5	51	4E
	20 39	1558	0616	D8	D6	51	4F
	20 40	1559	0617	D8	D7	51	50
	20 41	1560	0618	D8	D8	51	51
	20 42	1561	0619	D8	D9	51	52
	20 43	1562	061A	D8	5A	51	5D
	20 44	1563	061B	D8	5B	51	24
	20 45	1564	061C	D8	5C	51	2A
	20 46	1565	061D	D8	5D	51	29
	20 47	1566	061E	D8	5E	51	3B
	20 48	1567	061F	D8	5F	51	5E
	20 49	1568	0620	D8	60	51	2D
	20 50	1569	0621	D8	61	51	2F
	20 51	1570	0622	D8	E2	51	53
	20 52	1571	0623	D8	E3	51	54
	20 53	1572	0624	D8	E4	51	55
	20 54	1573	0625	D8	E5	51	56
	20 55	1574	0626	D8	E6	51	57
	20 56	1575	0627	D8	E7	51	58
	20 57	1576	0628	D8	E8	51	59
	20 58	1577	0629	D8	E9	51	5A
	20 59	1578	062A	D8	6A	51	7C
	20 60	1579	062B	D8	6B	51	2C
	20 61	1580	062C	D8	6C	51	25
	20 62	1581	062D	D8	6D	51	5F
	20 63	1582	062E	D8	6E	51	3E
	20 64	1583	062F	D8	6F	51	3F
	20 65	1584	0630	D8	F0	51	30
	20 66	1585	0631	D8	F1	51	31
	20 67	1586	0632	D8	F2	51	32
	20 68	1587	0633	D8	F3	51	33
	20 69	1588	0634	D8	F4	51	34
	20 70	1589	0635	D8	F5	51	35
	20 71	1590	0636	D8	F6	51	36
	20 72	1591	0637	D8	F7	51	37
	20 73	1592	0638	D8	F8	51	38
	20 74	1593	0639	D8	F9	51	39
	20 75	1594	063A	D8	7A	51	3A
	20 76	1595	063B	D8	7B	51	23
	20 77	1596	063C	D8	7C	51	40
	20 78	1597	063D	D8	7D	51	27
	20 79	1598	063E	D8	7E	51	3D
	20 80	1599	063F	D8	7F	51	22
	21 01	1600	0640	D9	40	52	20
	21 02	1601	0641	D9	C1	52	41
	21 03	1602	0642	D9	C2	52	42
	21 04	1603	0643	D9	C3	52	43
	21 05	1604	0644	D9	C4	52	44
	21 06	1605	0645	D9	C5	52	45
	21 07	1606	0646	D9	C6	52	46
	21 08	1607	0647	D9	C7	52	47
	21 09	1608	0648	D9	C8	52	48
	21 10	1609	0649	D9	C9	52	49
	21 11	1610	064A	D9	4A	52	5B
	21 12	1611	064B	D9	4B	52	2E

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
		21	13	1612	064C	D9	4C	52	3C
		21	14	1613	064D	D9	4D	52	28
		21	15	1614	064E	D9	4E	52	2B
		21	16	1615	064F	D9	4F	52	21
		21	17	1616	0650	D9	50	52	26
		21	18	1617	0651	D9	D1	52	4A
		21	19	1618	0652	D9	D2	52	4B
		21	20	1619	0653	D9	D3	52	4C
		21	21	1620	0654	D9	D4	52	4D
		21	22	1621	0655	D9	D5	52	4E
		21	23	1622	0656	D9	D6	52	4F
		21	24	1623	0657	D9	D7	52	50
		21	25	1624	0658	D9	D8	52	51
		21	26	1625	0659	D9	D9	52	52
		21	27	1626	065A	D9	5A	52	5D
		21	28	1627	065B	D9	5B	52	24
		21	29	1628	065C	D9	5C	52	2A
		21	30	1629	065D	D9	5D	52	29
		21	31	1630	065E	D9	5E	52	3B
		21	32	1631	065F	D9	5F	52	5E
		21	33	1632	0660	D9	60	52	2D
		21	34	1633	0661	D9	61	52	2F
		21	35	1634	0662	D9	E2	52	53
		21	36	1635	0663	D9	E3	52	54
		21	37	1636	0664	D9	E4	52	55
		21	38	1637	0665	D9	E5	52	56
		21	39	1638	0666	D9	E6	52	57
		21	40	1639	0667	D9	E7	52	58
		21	41	1640	0668	D9	E8	52	59
		21	42	1641	0669	D9	E9	52	5A
		21	43	1642	066A	D9	6A	52	7C
		21	44	1643	066B	D9	6B	52	2C
		21	45	1644	066C	D9	6C	52	25
		21	46	1645	066D	D9	6D	52	5F
		21	47	1646	066E	D9	6E	52	3E
		21	48	1647	066F	D9	6F	52	3F
		21	49	1648	0670	D9	F0	52	30
		21	50	1649	0671	D9	F1	52	31
		21	51	1650	0672	D9	F2	52	32
		21	52	1651	0673	D9	F3	52	33
		21	53	1652	0674	D9	F4	52	34
		21	54	1653	0675	D9	F5	52	35
		21	55	1654	0676	D9	F6	52	36
		21	56	1655	0677	D9	F7	52	37
		21	57	1656	0678	D9	F8	52	38
		21	58	1657	0679	D9	F9	52	39
		21	59	1658	067A	D9	7A	52	3A
		21	60	1659	067B	D9	7B	52	23
		21	61	1660	067C	D9	7C	52	40
		21	62	1661	067D	D9	7D	52	27
		21	63	1662	067E	D9	7E	52	3D
		21	64	1663	067F	D9	7F	52	22
		21	65	1664	0680	5A	40	5D	20
		21	66	1665	0681	5A	C1	5D	41
		21	67	1666	0682	5A	C2	5D	42
		21	68	1667	0683	5A	C3	5D	43
		21	69	1668	0684	5A	C4	5D	44
		21	70	1669	0685	5A	C5	5D	45
		21	71	1670	0686	5A	C6	5D	46
		21	72	1671	0687	5A	C7	5D	47
		21	73	1672	0688	5A	C8	5D	48
		21	74	1673	0689	5A	C9	5D	49

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>	<u> </u>	<u> </u>
21	75			1674	068A	5A	4A	5D	5B
21	76			1675	068B	5A	4B	5D	2E
21	77			1676	068C	5A	4C	5D	3C
21	78			1677	068D	5A	4D	5D	28
21	79			1678	068E	5A	4E	5D	2B
21	80			1679	068F	5A	4F	5D	21
22	01			1680	0690	5A	50	5D	26
22	02			1681	0691	5A	D1	5D	4A
22	03			1682	0692	5A	D2	5D	4B
22	04			1683	0693	5A	D3	5D	4C
22	05			1684	0694	5A	D4	5D	4D
22	06			1685	0695	5A	D5	5D	4E
22	07			1686	0696	5A	D6	5D	4F
22	08			1687	0697	5A	D7	5D	50
22	09			1688	0698	5A	D8	5D	51
22	10			1689	0699	5A	D9	5D	52
22	11			1690	069A	5A	5A	5D	5D
22	12			1691	069B	5A	5B	5D	24
22	13			1692	069C	5A	5C	5D	2A
22	14			1693	069D	5A	5D	5D	29
22	15			1694	069E	5A	5E	5D	3B
22	16			1695	069F	5A	5F	5D	5E
22	17			1696	06A0	5A	60	5D	2D
22	18			1697	06A1	5A	61	5D	2F
22	19			1698	06A2	5A	E2	5D	53
22	20			1699	06A3	5A	E3	5D	54
22	21			1700	06A4	5A	E4	5D	55
22	22			1701	06A5	5A	E5	5D	56
22	23			1702	06A6	5A	E6	5D	57
22	24			1703	06A7	5A	E7	5D	58
22	25			1704	06A8	5A	E8	5D	59
22	26			1705	06A9	5A	E9	5D	5A
22	27			1706	06AA	5A	6A	5D	7C
22	28			1707	06AB	5A	6B	5D	2C
22	29			1708	06AC	5A	6C	5D	25
22	30			1709	06AD	5A	6D	5D	5F
22	31			1710	06AE	5A	6E	5D	3E
22	32			1711	06AF	5A	6F	5D	3F
22	33			1712	06B0	5A	F0	5D	30
22	34			1713	06B1	5A	F1	5D	31
22	35			1714	06B2	5A	F2	5D	32
22	36			1715	06B3	5A	F3	5D	33
22	37			1716	06B4	5A	F4	5D	34
22	38			1717	06B5	5A	F5	5D	35
22	39			1718	06B6	5A	F6	5D	36
22	40			1719	06B7	5A	F7	5D	37
22	41			1720	06B8	5A	F8	5D	38
22	42			1721	06B9	5A	F9	5D	39
22	43			1722	06BA	5A	7A	5D	3A
22	44			1723	06BB	5A	7B	5D	23
22	45			1724	06BC	5A	7C	5D	40
22	46			1725	06BD	5A	7D	5D	27
22	47			1726	06BE	5A	7E	5D	3D
22	48			1727	06BF	5A	7F	5D	22
22	49			1728	06C0	5B	40	24	20
22	50			1729	06C1	5B	C1	24	41
22	51			1730	06C2	5B	C2	24	42
22	52			1731	06C3	5B	C3	24	43
22	53			1732	06C4	5B	C4	24	44
22	54			1733	06C5	5B	C5	24	45
22	55			1734	06C6	5B	C6	24	46
22	56			1735	06C7	5B	C7	24	47

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC		ASCII	
22	57		1736	06C8	5B	C8	24	48
22	58		1737	06C9	5B	C9	24	49
22	59		1738	06CA	5B	4A	24	5B
22	60		1739	06CB	5B	4B	24	2E
22	61		1740	06CC	5B	4C	24	3C
22	62		1741	06CD	5B	4D	24	28
22	63		1742	06CE	5B	4E	24	2B
22	64		1743	06CF	5B	4F	24	21
22	65		1744	06D0	5B	50	24	26
22	66		1745	06D1	5B	D1	24	4A
22	67		1746	06D2	5B	D2	24	4B
22	68		1747	06D3	5B	D3	24	4C
22	69		1748	06D4	5B	D4	24	4D
22	70		1749	06D5	5B	D5	24	4E
22	71		1750	06D6	5B	D6	24	4F
22	72		1751	06D7	5B	D7	24	50
22	73		1752	06D8	5B	D8	24	51
22	74		1753	06D9	5B	D9	24	52
22	75		1754	06DA	5B	5A	24	5D
22	76		1755	06DB	5B	5B	24	24
22	77		1756	06DC	5B	5C	24	2A
22	78		1757	06DD	5B	5D	24	29
22	79		1758	06DE	5B	5E	24	3B
22	80		1759	06DF	5B	5F	24	5E
23	01		1760	06E0	5B	60	24	2D
23	02		1761	06E1	5B	61	24	2F
23	03		1762	06E2	5B	E2	24	53
23	04		1763	06E3	5B	E3	24	54
23	05		1764	06E4	5B	E4	24	55
23	06		1765	06E5	5B	E5	24	56
23	07		1766	06E6	5B	E6	24	57
23	08		1767	06E7	5B	E7	24	58
23	09		1768	06E8	5B	E8	24	59
23	10		1769	06E9	5B	E9	24	5A
23	11		1770	06EA	5B	6A	24	7C
23	12		1771	06EB	5B	6B	24	2C
23	13		1772	06EC	5B	6C	24	25
23	14		1773	06ED	5B	6D	24	5F
23	15		1774	06EE	5B	6E	24	3E
23	16		1775	06EF	5B	6F	24	3F
23	17		1776	06F0	5B	F0	24	30
23	18		1777	06F1	5B	F1	24	31
23	19		1778	06F2	5B	F2	24	32
23	20		1779	06F3	5B	F3	24	33
23	21		1780	06F4	5B	F4	24	34
23	22		1781	06F5	5B	F5	24	35
23	23		1782	06F6	5B	F6	24	36
23	24		1783	06F7	5B	F7	24	37
23	25		1784	06F8	5B	F8	24	38
23	26		1785	06F9	5B	F9	24	39
23	27		1786	06FA	5B	7A	24	3A
23	28		1787	06FB	5B	7B	24	23
23	29		1788	06FC	5B	7C	24	40
23	30		1789	06FD	5B	7D	24	27
23	31		1790	06FE	5B	7E	24	3D
23	32		1791	06FF	5B	7F	24	22
23	33		1792	0700	5C	40	2A	20
23	34		1793	0701	5C	C1	2A	41
23	35		1794	0702	5C	C2	2A	42
23	36		1795	0703	5C	C3	2A	43
23	37		1796	0704	5C	C4	2A	44
23	38		1797	0705	5C	C5	2A	45

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
23	39			1798	0706	5C	C6	2A	46
23	40			1799	0707	5C	C7	2A	47
23	41			1800	0708	5C	C8	2A	48
23	42			1801	0709	5C	C9	2A	49
23	43			1802	070A	5C	4A	2A	5B
23	44			1803	070B	5C	4B	2A	2E
23	45			1804	070C	5C	4C	2A	3C
23	46			1805	070D	5C	4D	2A	28
23	47			1806	070E	5C	4E	2A	2B
23	48			1807	070F	5C	4F	2A	21
23	49			1808	0710	5C	50	2A	26
23	50			1809	0711	5C	D1	2A	4A
23	51			1810	0712	5C	D2	2A	4B
23	52			1811	0713	5C	D3	2A	4C
23	53			1812	0714	5C	D4	2A	4D
23	54			1813	0715	5C	D5	2A	4E
23	55			1814	0716	5C	D6	2A	4F
23	56			1815	0717	5C	D7	2A	50
23	57			1816	0718	5C	D8	2A	51
23	58			1817	0719	5C	D9	2A	52
23	59			1818	071A	5C	5A	2A	5D
23	60			1819	071B	5C	5B	2A	24
23	61			1820	071C	5C	5C	2A	2A
23	62			1821	071D	5C	5D	2A	29
23	63			1822	071E	5C	5E	2A	3B
23	64			1823	071F	5C	5F	2A	5E
23	65			1824	0720	5C	60	2A	2D
23	66			1825	0721	5C	61	2A	2F
23	67			1826	0722	5C	E2	2A	53
23	68			1827	0723	5C	E3	2A	54
23	69			1828	0724	5C	E4	2A	55
23	70			1829	0725	5C	E5	2A	56
23	71			1830	0726	5C	E6	2A	57
23	72			1831	0727	5C	E7	2A	58
23	73			1832	0728	5C	E8	2A	59
23	74			1833	0729	5C	E9	2A	5A
23	75			1834	072A	5C	6A	2A	7C
23	76			1835	072B	5C	6B	2A	2C
23	77			1836	072C	5C	6C	2A	25
23	78			1837	072D	5C	6D	2A	5F
23	79			1838	072E	5C	6E	2A	3E
23	80			1839	072F	5C	6F	2A	3F
24	01			1840	0730	5C	F0	2A	30
24	02			1841	0731	5C	F1	2A	31
24	03			1842	0732	5C	F2	2A	32
24	04			1843	0733	5C	F3	2A	33
24	05			1844	0734	5C	F4	2A	34
24	06			1845	0735	5C	F5	2A	35
24	07			1846	0736	5C	F6	2A	36
24	08			1847	0737	5C	F7	2A	37
24	09			1848	0738	5C	F8	2A	38
24	10			1849	0739	5C	F9	2A	39
24	11			1850	073A	5C	7A	2A	3A
24	12			1851	073B	5C	7B	2A	23
24	13			1852	073C	5C	7C	2A	40
24	14			1853	073D	5C	7D	2A	27
24	15			1854	073E	5C	7E	2A	3D
24	16			1855	073F	5C	7F	2A	22
24	17			1856	0740	5D	40	29	20
24	18			1857	0741	5D	C1	29	41
24	19			1858	0742	5D	C2	29	42
24	20			1859	0743	5D	C3	29	43

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
24	21			1860	0744	5D	C4	29	44
24	22			1861	0745	5D	C5	29	45
24	23			1862	0746	5D	C6	29	46
24	24			1863	0747	5D	C7	29	47
24	25			1864	0748	5D	C8	29	48
24	26			1865	0749	5D	C9	29	49
24	27			1866	074A	5D	4A	29	5B
24	28			1867	074B	5D	4B	29	2E
24	29			1868	074C	5D	4C	29	3C
24	30			1869	074D	5D	4D	29	28
24	31			1870	074E	5D	4E	29	2B
24	32			1871	074F	5D	4F	29	21
24	33			1872	0750	5D	50	29	26
24	34			1873	0751	5D	D1	29	4A
24	35			1874	0752	5D	D2	29	4B
24	36			1875	0753	5D	D3	29	4C
24	37			1876	0754	5D	D4	29	4D
24	38			1877	0755	5D	D5	29	4E
24	39			1878	0756	5D	D6	29	4F
24	40			1879	0757	5D	D7	29	50
24	41			1880	0758	5D	D8	29	51
24	42			1881	0759	5D	D9	29	52
24	43			1882	075A	5D	5A	29	5D
24	44			1883	075B	5D	5B	29	24
24	45			1884	075C	5D	5C	29	2A
24	46			1885	075D	5D	5D	29	29
24	47			1886	075E	5D	5E	29	3B
24	48			1887	075F	5D	5F	29	5E
24	49			1888	0760	5D	60	29	2D
24	50			1889	0761	5D	61	29	2F
24	51			1890	0762	5D	E2	29	53
24	52			1891	0763	5D	E3	29	54
24	53			1892	0764	5D	E4	29	55
24	54			1893	0765	5D	E5	29	56
24	55			1894	0766	5D	E6	29	57
24	56			1895	0767	5D	E7	29	58
24	57			1896	0768	5D	E8	29	59
24	58			1897	0769	5D	E9	29	5A
24	59			1898	076A	5D	6A	29	7C
24	60			1899	076B	5D	6B	29	2C
24	61			1900	076C	5D	6C	29	25
24	62			1901	076D	5D	6D	29	5F
24	63			1902	076E	5D	6E	29	3E
24	64			1903	076F	5D	6F	29	3F
24	65			1904	0770	5D	F0	29	30
24	66			1905	0771	5D	F1	29	31
24	67			1906	0772	5D	F2	29	32
24	68			1907	0773	5D	F3	29	33
24	69			1908	0774	5D	F4	29	34
24	70			1909	0775	5D	F5	29	35
24	71			1910	0776	5D	F6	29	36
24	72			1911	0777	5D	F7	29	37
24	73			1912	0778	5D	F8	29	38
24	74			1913	0779	5D	F9	29	39
24	75			1914	077A	5D	7A	29	3A
24	76			1915	077B	5D	7B	29	23
24	77			1916	077C	5D	7C	29	40
24	78			1917	077D	5D	7D	29	27
24	79			1918	077E	5D	7E	29	3D
24	80			1919	077F	5D	7F	29	22
25	01			1920	0780	5E	40	3B	20
25	02			1921	0781	5E	C1	3B	41

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
25	03			1922	0782	5E	C2	3B	42
25	04			1923	0783	5E	C3	3B	43
25	05			1924	0784	5E	C4	3B	44
25	06			1925	0785	5E	C5	3B	45
25	07			1926	0786	5E	C6	3B	46
25	08			1927	0787	5E	C7	3B	47
25	09			1928	0788	5E	C8	3B	48
25	10			1929	0789	5E	C9	3B	49
25	11			1930	078A	5E	4A	3B	5B
25	12			1931	078B	5E	4B	3B	2E
25	13			1932	078C	5E	4C	3B	3C
25	14			1933	078D	5E	4D	3B	28
25	15			1934	078E	5E	4E	3B	2B
25	16			1935	078F	5E	4F	3B	21
25	17			1936	0790	5E	50	3B	26
25	18			1937	0791	5E	D1	3B	4A
25	19			1938	0792	5E	D2	3B	4B
25	20			1939	0793	5E	D3	3B	4C
25	21			1940	0794	5E	D4	3B	4D
25	22			1941	0795	5E	D5	3B	4E
25	23			1942	0796	5E	D6	3B	4F
25	24			1943	0797	5E	D7	3B	50
25	25			1944	0798	5E	D8	3B	51
25	26			1945	0799	5E	D9	3B	52
25	27			1946	079A	5E	5A	3B	5D
25	28			1947	079B	5E	5B	3B	2A
25	29			1948	079C	5E	5C	3B	2A
25	30			1949	079D	5E	5D	3B	29
25	31			1950	079E	5E	5E	3B	3B
25	32			1951	079F	5E	5F	3B	5E
25	33			1952	07A0	5E	60	3B	2D
25	34			1953	07A1	5E	61	3B	2F
25	35			1954	07A2	5E	E2	3B	53
25	36			1955	07A3	5E	E3	3B	54
25	37			1956	07A4	5E	E4	3B	55
25	38			1957	07A5	5E	E5	3B	56
25	39			1958	07A6	5E	E6	3B	57
25	40			1959	07A7	5E	E7	3B	5E
25	41			1960	07A8	5E	E8	3B	5E
25	42			1961	07A9	5E	E9	3B	5F
25	43			1962	07AA	5E	6A	3B	7C
25	44			1963	07AB	5E	6B	3B	2C
25	45			1964	07AC	5E	6C	3B	2E
25	46			1965	07AD	5E	6D	3B	5F
25	47			1966	07AE	5E	6E	3B	3F
25	48			1967	07AF	5E	6F	3B	3F
25	49			1968	07B0	5E	F0	3B	3C
25	50			1969	07B1	5E	F1	3B	31
25	51			1970	07B2	5E	F2	3B	32
25	52			1971	07B3	5E	F3	3B	33
25	53			1972	07B4	5E	F4	3B	34
25	54			1973	07B5	5E	F5	3B	35
25	55			1974	07B6	5E	F6	3B	36
25	56			1975	07B7	5E	F7	3B	37
25	57			1976	07B8	5E	F8	3B	38
25	58			1977	07B9	5E	F9	3B	39
25	59			1978	07BA	5E	7A	3B	3A
25	60			1979	07BB	5E	7B	3B	23
25	61			1980	07BC	5E	7C	3B	40
25	62			1981	07BD	5E	7D	3B	27
25	63			1982	07BE	5E	7E	3B	3D
25	64			1983	07BF	5E	7F	3B	22

Mod 1 R C	Mods 2,3,4 R C	Position		Buffer Address (Hex)			
		Dec	Hex	EBCDIC	ASCII		
	25 65	1984	07C0	5F	40	5E	20
	25 66	1985	07C1	5F	C1	5E	41
	25 67	1986	07C2	5F	C2	5E	42
	25 68	1987	07C3	5F	C3	5E	43
	25 69	1988	07C4	5F	C4	5E	44
	25 70	1989	07C5	5F	C5	5E	45
	25 71	1990	07C6	5F	C6	5E	46
	25 72	1991	07C7	5F	C7	5E	47
	25 73	1992	07C8	5F	C8	5E	48
	25 74	1993	07C9	5F	C9	5E	49
	25 75	1994	07CA	5F	4A	5E	5B
	25 76	1995	07CB	5F	4B	5E	2E
	25 77	1996	07CC	5F	4C	5E	3C
	25 78	1997	07CD	5F	4D	5E	28
	25 79	1998	07CE	5F	4E	5E	2B
	25 80	1999	07CF	5F	4F	5E	21
	26 01	2000	07D0	5F	50	5E	26
	26 02	2001	07D1	5F	D1	5E	4A
	26 03	2002	07D2	5F	D2	5E	4B
	26 04	2003	07D3	5F	D3	5E	AC
	26 05	2004	07D4	5F	D4	5E	AD
	26 06	2005	07D5	5F	D5	5E	4E
	26 07	2006	07D6	5F	D6	5E	4F
	26 08	2007	07D7	5F	D7	5E	50
	26 09	2008	07D8	5F	D8	5E	51
	26 10	2009	07D9	5F	D9	5E	52
	26 11	2010	07DA	5F	5A	5E	5D
	26 12	2011	07DB	5F	5B	5E	24
	26 13	2012	07DC	5F	5C	5E	2A
	26 14	2013	07DD	5F	5D	5E	29
	26 15	2014	07DE	5F	5E	5E	3B
	26 16	2015	07DF	5F	5F	5E	5E
	26 17	2016	07E0	5F	60	5E	2D
	26 18	2017	07E1	5F	61	5E	2F
	26 19	2018	07E2	5F	E2	5E	53
	26 20	2019	07E3	5F	E3	5E	54
	26 21	2020	07E4	5F	E4	5E	55
	26 22	2021	07E5	5F	E5	5E	56
	26 23	2022	07E6	5F	E6	5E	57
	26 24	2023	07E7	5F	E7	5E	58
	26 25	2024	07E8	5F	E8	5E	59
	26 26	2025	07E9	5F	E9	5E	5A
	26 27	2026	07EA	5F	6A	5E	7C
	26 28	2027	07EB	5F	6B	5E	2C
	26 29	2028	07EC	5F	6C	5E	25
	26 30	2029	07ED	5F	6D	5E	5F
	26 31	2030	07EE	5F	6E	5E	3E
	26 32	2031	07EF	5F	6F	5E	3F
	26 33	2032	07F0	5F	F0	5E	30
	26 34	2033	07F1	5F	F1	5E	31
	26 35	2034	07F2	5F	F2	5E	32
	26 36	2035	07F3	5F	F3	5E	33
	26 37	2036	07F4	5F	F4	5E	34
	26 38	2037	07F5	5F	F5	5E	35
	26 39	2038	07F6	5F	F6	5E	36
	26 40	2039	07F7	5F	F7	5E	37
	26 41	2040	07F8	5F	F8	5E	38
	26 42	2041	07F9	5F	F9	5E	39
	26 43	2042	07FA	5F	7A	5E	3A
	26 44	2043	07FB	5F	7B	5E	23
	26 45	2044	07FC	5F	7C	5E	40
	26 46	2045	07FD	5F	7D	5E	27

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
26	47			2046	07FE	5F	7E	5E	D3
26	48			2047	07FF	5F	7F	5E	22
26	49			2048	0800	60	40	2D	20
26	50			2049	0801	60	C1	2D	41
26	51			2050	0802	60	C2	2D	42
26	52			2051	0803	60	C3	2D	43
26	53			2052	0804	60	C4	2D	44
26	54			2053	0805	60	C5	2D	45
26	55			2054	0806	60	C6	2D	46
26	56			2055	0807	60	C7	2D	47
26	57			2056	0808	60	C8	2D	48
26	58			2057	0809	60	C9	2D	49
26	59			2058	080A	60	4A	2D	5B
26	60			2059	080B	60	4B	2D	2E
26	61			2060	080C	60	4C	2D	3C
26	62			2061	080D	60	4D	2D	28
26	63			2062	080E	60	4E	2D	2B
26	64			2063	080F	60	4F	2D	21
26	65			2064	0810	60	50	2D	26
26	66			2065	0811	60	D1	2D	4A
26	67			2066	0812	60	D2	2D	4B
26	68			2067	0813	60	D3	2D	4C
26	69			2068	0814	60	D4	2D	4D
26	70			2069	0815	60	D5	2D	4E
26	71			2070	0816	60	D6	2D	4F
26	72			2071	0817	60	D7	2D	50
26	73			2072	0818	60	D8	2D	51
26	74			2073	0819	60	D9	2D	52
26	75			2074	081A	60	5A	2D	5D
26	76			2075	081B	60	5B	2D	24
26	77			2076	081C	60	5C	2D	2A
26	78			2077	081D	60	5D	2D	29
26	79			2078	081E	60	5E	2D	3B
26	80			2079	081F	60	5F	2D	5E
27	01			2080	0820	60	60	2D	2D
27	02			2081	0821	60	61	2D	2F
27	03			2082	0822	60	E2	2D	53
27	04			2083	0823	60	E3	2D	54
27	05			2084	0824	60	E4	2D	55
27	06			2085	0825	60	E5	2D	56
27	07			2086	0826	60	E6	2D	57
27	08			2087	0827	60	E7	2D	58
27	09			2088	0828	60	E8	2D	59
27	10			2089	0829	60	E9	2D	5A
27	11			2090	082A	60	6A	2D	7C
27	12			2091	082B	60	6B	2D	2C
27	13			2092	082C	60	6C	2D	25
27	14			2093	082D	60	6D	2D	5F
27	15			2094	082E	60	6E	2D	3E
27	16			2095	082F	60	6F	2D	3F
27	17			2096	0830	60	F0	2D	30
27	18			2097	0831	60	F1	2D	31
27	19			2098	0832	60	F2	2D	32
27	20			2099	0833	60	F3	2D	33
27	21			2100	0834	60	F4	2D	34
27	22			2101	0835	60	F5	2D	35
27	23			2102	0836	60	F6	2D	36
27	24			2103	0837	60	F7	2D	37
27	25			2104	0838	60	F8	2D	38
27	26			2105	0839	60	F9	2D	39
27	27			2106	083A	60	7A	2D	3A
27	28			2107	083B	60	7B	2D	23

Mod 1 R C	Mods 2,3,4 R C	Position		Buffer Address (Hex)			
		Dec	Hex	EBCDIC	ASCII		
	27 29	2108	083C	60	7C	2D	40
	27 30	2109	083D	60	7D	2D	27
	27 31	2110	083E	60	7E	2D	3D
	27 32	2111	083F	60	7F	2D	22
	27 33	2112	0840	61	40	2F	20
	27 34	2113	0841	61	C1	2F	41
	27 35	2114	0842	61	C2	2F	42
	27 36	2115	0843	61	C3	2F	43
	27 37	2116	0844	61	C4	2F	44
	27 38	2117	0845	61	C5	2F	45
	27 39	2118	0846	61	C6	2F	46
	27 40	2119	0847	61	C7	2F	47
	27 41	2120	0848	61	C8	2F	48
	27 42	2121	0849	61	C9	2F	49
	27 43	2122	084A	61	4A	2F	5B
	27 44	2123	084B	61	4B	2F	2E
	27 45	2124	084C	61	4C	2F	3C
	27 46	2125	084D	61	AD	2F	28
	27 47	2126	084E	61	4E	2F	2B
	27 48	2127	084F	61	4F	2F	21
	27 49	2128	0850	61	50	2F	26
	27 50	2129	0851	61	D1	2F	4A
	27 51	2130	0852	61	D2	2F	4B
	27 52	2131	0853	61	D3	2F	4C
	27 53	2132	0854	61	D4	2F	4D
	27 54	2133	0855	61	D5	2F	4E
	27 55	2134	0856	61	D6	2F	4F
	27 56	2135	0857	61	D7	2F	50
	27 57	2136	0858	61	D8	2F	51
	27 58	2137	0859	61	D9	2F	52
	27 59	2138	085A	61	5A	2F	5D
	27 60	2139	085B	61	5B	2F	24
	27 61	2140	085C	61	5C	2F	2A
	27 62	2141	085D	61	5D	2F	29
	27 63	2142	085E	61	5E	2F	3B
	27 64	2143	085F	61	5F	2F	5E
	27 65	2144	0860	61	60	2F	2D
	27 66	2145	0861	61	61	2F	2F
	27 67	2146	0862	61	E2	2F	53
	27 68	2147	0863	61	E3	2F	54
	27 69	2148	0864	61	E4	2F	55
	27 70	2149	0865	61	E5	2F	56
	27 71	2150	0866	61	E6	2F	57
	27 72	2151	0867	61	E7	2F	58
	27 73	2152	0868	61	E8	2F	59
	27 74	2153	0869	61	E9	2F	5A
	27 75	2154	086A	61	6A	2F	7C
	27 76	2155	086B	61	6B	2F	2C
	27 77	2156	086C	61	6C	2F	25
	27 78	2157	086D	61	6D	2F	5F
	27 79	2158	086E	61	6E	2F	3E
	27 80	2159	086F	61	6F	2F	3F
	28 01	2160	0870	61	F0	2F	30
	28 02	2161	0871	61	F1	2F	31
	28 03	2162	0872	61	F2	2F	32
	28 04	2163	0873	61	F3	2F	33
	28 05	2164	0874	61	F4	2F	34
	28 06	2165	0875	61	F5	2F	35
	28 07	2166	0876	61	F6	2F	36
	28 08	2167	0877	61	F7	2F	37
	28 09	2168	0878	61	F8	2F	38
	28 10	2169	0879	61	F9	2F	39

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC		ASCII	
28 11			2170	087A	61	7A	2F	3A
28 12			2171	087B	61	7B	2F	23
28 13			2172	087C	61	7C	2F	40
28 14			2173	087D	61	7D	2F	27
28 15			2174	087E	61	7E	2F	3D
28 16			2175	087F	61	7F	2F	22
28 17			2176	0880	F2	40	53	20
28 18			2177	0881	E2	C1	53	41
28 19			2178	0882	E2	C2	53	42
28 20			2179	0883	E2	C3	53	43
28 21			2180	0884	E2	C4	53	44
28 22			2181	0885	E2	C5	53	45
28 23			2182	0886	E2	C6	53	46
28 24			2183	0887	E2	C7	53	47
28 25			2184	0888	E2	C8	53	48
28 26			2185	0889	E2	C9	53	49
28 27			2186	088A	E2	4A	53	5B
28 28			2187	088B	E2	4B	53	2E
28 29			2188	088C	E2	4C	53	3C
28 30			2189	088D	E2	4D	53	28
28 31			2190	088E	E2	4E	53	2B
28 32			2191	088F	E2	4F	53	21
28 33			2192	0890	E2	50	53	26
28 34			2193	0891	E2	D1	53	4A
28 35			2194	0892	E2	D2	53	4B
28 36			2195	0893	E2	D3	53	4C
28 37			2196	0894	E2	D4	53	4D
28 38			2197	0895	E2	D5	53	4E
28 39			2198	0896	E2	D6	53	4F
28 40			2199	0897	E2	D7	53	50
28 41			2200	0898	E2	D8	53	51
28 42			2201	0899	E2	D9	53	52
28 43			2202	089A	E2	5A	53	5D
28 44			2203	089B	E2	5B	53	24
28 45			2204	089C	E2	5C	53	2A
28 46			2205	089D	E2	5D	53	29
28 47			2206	089E	E2	5E	53	3B
28 48			2207	089F	E2	5F	53	5E
28 49			2208	08A0	E2	60	53	2D
28 50			2209	08A1	E2	61	53	2F
28 51			2210	08A2	E2	E2	53	53
28 52			2211	08A3	E2	E3	53	54
28 53			2212	08A4	E2	E4	53	55
28 54			2213	08A5	E2	E5	53	56
28 55			2214	08A6	E2	E6	53	57
28 56			2215	08A7	E2	E7	53	58
28 57			2216	08A8	E2	E8	53	59
28 58			2217	08A9	E2	E9	53	5A
28 59			2218	08AA	E2	6A	53	7C
28 60			2219	08AB	E2	6B	53	2C
28 61			2220	08AC	E2	6C	53	25
28 62			2221	08AD	E2	6D	53	5F
28 63			2222	08AE	E2	6E	53	3E
28 64			2223	08AF	E2	6F	53	3F
28 65			2224	08B0	E2	F0	53	30
28 66			2225	08B1	E2	F1	53	31
28 67			2226	08B2	E2	F2	53	32
28 68			2227	08B3	F2	F3	53	33
28 69			2228	08B4	E2	F4	53	34
28 70			2229	08B5	E2	F5	53	35
28 71			2230	08B6	E2	F6	53	36
28 72			2231	08B7	E2	F7	53	37

Mod 1 R C	Mods 2,3,4 R C	Position		Buffer Address (Hex)			
		Dec	Hex	EBCDIC	ASCII		
	28 73	2232	08B8	E2	F8	53	38
	28 74	2233	08B9	E2	F9	53	39
	28 75	2234	08BA	E2	7A	53	3A
	28 76	2235	08BB	E2	7B	53	23
	28 77	2236	08BC	E2	7C	53	40
	28 78	2237	08BD	E2	7D	53	27
	28 79	2238	08BE	E2	7E	53	3D
	28 80	2239	08BF	E2	7F	53	22
	29 01	2240	08C0	E3	40	54	20
	29 02	2241	08C1	E3	C1	54	41
	29 03	2242	08C2	E3	C2	54	42
	29 04	2243	08C3	F3	C3	54	43
	29 05	2244	08C4	E3	C4	54	44
	29 06	2245	08C5	E3	C5	54	45
	29 07	2246	08C6	E3	C6	54	46
	29 08	2247	08C7	E3	C7	54	47
	29 09	2248	08C8	E3	C8	54	48
	29 10	2249	08C9	E3	C9	54	49
	29 11	2250	08CA	E3	4A	54	5B
	29 12	2251	08CB	E3	4B	54	2E
	29 13	2252	08CC	E3	4C	54	3C
	29 14	2253	08CD	E3	4D	54	28
	29 15	2254	08CE	E3	4E	54	2B
	29 16	2255	08CF	E3	4F	54	21
	29 17	2256	08D0	E3	50	54	26
	29 18	2257	08D1	E3	D1	54	4A
	28 19	2258	08D2	E3	D2	54	4B
	29 20	2259	08D3	E3	D3	54	4C
	29 21	2260	08D4	E3	D4	54	4D
	29 22	2261	08D5	E3	D5	54	4E
	29 23	2262	08D6	E3	D6	54	4F
	29 24	2263	08D7	E3	D7	54	50
	29 25	2264	08D8	E3	D8	54	51
	29 26	2265	08D9	E3	D9	54	52
	29 27	2266	08DA	E3	5A	54	5D
	29 28	2267	08DB	E3	5B	54	24
	29 29	2268	08DC	E3	5C	54	2A
	29 30	2269	08DD	E3	5D	54	29
	29 31	2270	08DE	E3	5E	54	3B
	29 32	2271	08DF	E3	5F	54	5E
	29 33	2272	08E0	E3	60	54	2D
	29 34	2273	08E1	E3	61	54	2F
	29 35	2274	08E2	E3	E2	54	53
	29 36	2275	08E3	E3	E3	54	54
	29 37	2276	08E4	E3	E4	54	55
	29 38	2277	08E5	E3	E5	54	56
	29 39	2278	08E6	E3	E6	54	57
	29 40	2279	08E7	E3	E7	54	58
	29 41	2280	08E8	E3	E8	54	59
	29 42	2281	08E9	E3	E9	54	5A
	29 43	2282	08EA	E3	6A	54	7C
	29 44	2283	08EB	E3	6B	54	2C
	29 45	2284	08EC	E3	6C	54	25
	29 46	2285	08ED	E3	6D	54	5F
	29 47	2286	08EE	E3	6E	54	3E
	29 48	2287	08EF	E3	6F	54	3F
	29 49	2288	08F0	F3	F0	54	30
	29 50	2289	08F1	E3	F1	54	31
	29 51	2290	08F2	E3	F2	54	32
	29 52	2291	08F3	E3	F3	54	33
	29 53	2292	08F4	E3	F4	54	34
	29 54	2293	08F5	E3	F5	54	35

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC	ASCII		
29	55		2294	08F6	E3	F6	54	36
29	56		2295	08F7	E3	F7	54	37
29	57		2296	08F8	E3	F8	54	38
29	58		2297	08F9	E3	F9	54	39
29	59		2298	08FA	E3	7A	54	3A
29	60		2299	08FB	E3	7B	54	23
29	61		2300	08FC	E3	7C	54	40
29	62		2301	08FD	E3	7D	54	27
29	63		2302	08FE	E3	7E	54	3D
29	64		2303	08FF	E3	7F	54	22
29	65		2304	0900	E4	40	55	20
29	66		2305	0901	E4	C1	55	41
29	67		2306	0902	E4	C2	55	42
29	68		2307	0903	E4	C3	55	43
29	69		2308	0904	E4	C4	55	44
29	70		2309	0905	E4	C5	55	45
29	71		2310	0906	E4	C6	55	46
29	72		2311	0907	E4	C7	55	47
29	73		2312	0908	E4	C8	55	48
29	74		2313	0909	E4	C9	55	49
29	75		2314	090A	E4	4A	55	5B
29	76		2315	090B	E4	4B	55	2E
29	77		2316	090C	E4	4C	55	3C
29	78		2317	090D	E4	4D	55	28
29	79		2318	090E	E4	4E	55	2B
29	80		2319	090F	E4	4F	55	21
30	01		2320	0910	E4	50	55	26
30	02		2321	0911	E4	D1	55	4A
30	03		2322	0912	E4	D2	55	4B
30	04		2323	0913	E4	D3	55	4C
30	05		2324	0914	E4	D4	55	4D
30	06		2325	0915	E4	D5	55	4E
30	07		2326	0916	E4	D6	55	4F
30	08		2327	0917	E4	D7	55	50
30	09		2328	0918	E4	D8	55	51
30	10		2329	0919	E4	D9	55	52
30	11		2330	091A	E4	5A	55	5D
30	12		2331	091B	E4	5B	55	24
30	13		2332	091C	E4	5C	55	2A
30	14		2333	091D	E4	5D	55	29
30	15		2334	091E	E4	5E	55	3B
30	16		2335	091F	E4	5F	55	5E
30	17		2336	0920	E4	60	55	2D
30	18		2337	0921	E4	61	55	2F
30	19		2338	0922	E4	E2	55	53
30	20		2339	0923	E4	E3	55	54
30	21		2340	0924	E4	E4	55	55
30	22		2341	0925	E4	E5	55	56
30	23		2342	0926	E4	E6	55	57
30	24		2343	0927	E4	E7	55	58
30	25		2344	0928	E4	E8	55	59
30	26		2345	0929	E4	E9	55	5A
30	27		2346	092A	E4	6A	55	7C
30	28		2347	092B	E4	6B	55	2C
30	29		2348	092C	E4	6C	55	25
30	30		2349	092D	E4	6D	55	5F
30	31		2350	092E	E4	6E	55	3E
30	32		2351	092F	E4	6F	55	3F
30	33		2352	0930	E4	F0	55	30
30	34		2353	0931	E4	F1	55	31
30	35		2354	0932	E4	F2	55	32
30	36		2355	0933	E4	F3	55	33

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
30	37			2356	0934	E4	F4	55	34
30	38			2357	0935	E4	F5	55	35
30	39			2358	0936	E4	F6	55	36
30	40			2359	0937	E4	F7	55	37
30	41			2360	0938	E4	F8	55	38
30	42			2361	0939	E4	F9	55	39
30	43			2362	093A	E4	7A	55	3A
30	44			2363	093B	E4	7B	55	23
30	45			2364	093C	E4	7C	55	40
30	46			2365	093D	E4	7D	55	27
30	47			2366	093E	E4	7E	55	3D
30	48			2367	093F	E4	7F	55	22
30	49			2368	0940	E5	40	56	20
30	50			2369	0941	E5	C1	56	41
30	51			2370	0942	E5	C2	56	42
30	52			2371	0943	E5	C3	56	43
30	53			2372	0944	E5	C4	56	44
30	54			2373	0945	E5	C5	56	45
30	55			2374	0946	E5	C6	56	46
30	56			2375	0947	E5	C7	56	47
30	57			2376	0948	E5	C8	56	48
30	58			2377	0949	E5	C9	56	49
30	59			2378	094A	E5	4A	56	5B
30	60			2379	094B	E5	4B	56	2E
30	61			2380	094C	E5	4C	56	3C
30	62			2381	094D	E5	4D	56	28
30	63			2382	094E	E5	4E	56	2B
30	64			2383	094F	E5	4F	56	21
30	65			2384	0950	E5	50	56	26
30	66			2385	0951	E5	D1	56	4A
30	67			2386	0952	E5	D2	56	4B
30	68			2387	0953	E5	D3	56	4C
30	69			2388	0954	E5	D4	56	4D
30	70			2389	0955	E5	D5	56	4E
30	71			2390	0956	E5	D6	56	4F
30	72			2391	0957	E5	D7	56	50
30	73			2392	0958	E5	D8	56	51
30	74			2393	0959	E5	D9	56	52
30	75			2394	095A	E5	5A	56	5D
30	76			2395	095B	E5	5B	56	24
30	77			2396	095C	E5	5C	56	2A
30	78			2397	095D	E5	5D	56	29
30	79			2398	095E	E5	5E	56	3B
30	80			2399	095F	E5	5F	56	5E
31	01			2400	0960	E5	60	56	2D
31	02			2401	0961	E5	61	56	2F
31	03			2402	0962	E5	E2	56	53
31	04			2403	0963	E5	E3	56	54
31	05			2404	0964	E5	E4	56	55
31	06			2405	0965	E5	E5	56	56
31	07			2406	0966	E5	E6	56	57
31	08			2407	0967	E5	E7	56	58
31	09			2408	0968	E5	E8	56	59
31	10			2409	0969	E5	E9	56	5A
31	11			2410	096A	E5	6A	56	7C
31	12			2411	096B	E5	6B	56	2C
31	13			2412	096C	E5	6C	56	25
31	14			2413	096D	E5	6D	56	5F
31	15			2414	096E	E5	6E	56	3E
31	16			2415	096F	E5	6F	56	3F
31	17			2416	0970	E5	F0	56	30
31	18			2417	0971	E5	F1	56	31

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC		ASCII	
31	19		2418	0972	E5	F2	56	32
31	20		2419	0973	E5	F3	56	33
31	21		2420	0974	E5	F4	56	34
31	22		2421	0975	E5	F5	56	35
31	23		2422	0976	E5	F6	56	36
31	24		2423	0977	E5	F7	56	37
31	25		2424	0978	E5	F8	56	38
31	26		2425	0979	E5	F9	56	39
31	27		2426	097A	E5	7A	56	3A
31	28		2427	097B	E5	7B	56	23
31	29		2428	097C	E5	7C	56	40
31	30		2429	097D	E5	7D	56	27
31	31		2430	097E	E5	7E	56	3D
31	32		2431	097F	E5	7F	56	22
31	33		2432	0980	E6	40	57	20
31	34		2433	0981	E6	C1	57	41
31	35		2434	0982	E6	C2	57	42
31	36		2435	0983	E6	C3	57	43
31	37		2436	0984	E6	C4	57	44
31	38		2437	0985	E6	C5	57	45
31	39		2438	0986	E6	C6	57	46
31	40		2439	0987	E6	C7	57	47
31	41		2440	0988	E6	C8	57	48
31	42		2441	0989	E6	C9	57	49
31	43		2442	098A	E6	4A	57	5B
31	44		2443	098B	E6	4B	57	2E
31	45		2444	098C	E6	4C	57	3C
31	46		2445	098D	E6	4D	57	28
31	47		2446	098E	E6	4E	57	2B
31	48		2447	098F	E6	4F	57	21
31	49		2448	0990	E6	50	57	26
31	50		2449	0991	E6	D1	57	4A
31	51		2450	0992	E6	D2	57	4B
31	52		2451	0993	E6	D3	57	4C
31	53		2452	0994	E6	D4	57	4D
31	54		2453	0995	E6	D5	57	4E
31	55		2454	0996	E6	D6	57	4F
31	56		2455	0997	E6	D7	57	50
31	57		2456	0998	E6	D8	57	51
31	58		2457	0999	E6	D9	57	52
31	59		2458	099A	E6	5A	57	5D
31	60		2459	099B	E6	5B	57	24
31	61		2460	099C	E6	5C	57	2A
31	62		2461	099D	E6	5D	57	29
31	63		2462	099E	E6	5E	57	3B
31	64		2463	099F	E6	5F	57	5E
31	65		2464	09A0	E6	60	57	2D
31	66		2465	09A1	E6	61	57	2F
31	67		2466	09A2	E6	E2	57	53
31	68		2467	09A3	E6	E3	57	54
31	69		2468	09A4	E6	E4	57	55
31	70		2469	09A5	E6	E5	57	56
31	71		2470	09A6	E6	E6	57	57
31	72		2471	09A7	E6	E7	57	58
31	73		2472	09A8	E6	E8	57	59
31	74		2473	09A9	E6	E9	57	5A
31	75		2474	09AA	E6	6A	57	7C
31	76		2475	09AB	E6	6B	57	2C
31	77		2476	09AC	E6	6C	57	25
31	78		2477	09AD	E6	6D	57	5F
31	79		2478	09AE	E6	6E	57	3E
31	80		2479	09AF	E6	6F	57	3F

Mod 1 R C	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC		ASCII	
	32	01	2480	09B0	E6	F0	57	30
	32	02	2481	09B1	E6	F1	57	31
	32	03	2482	09B2	E6	F2	57	32
	32	04	2483	09B3	E6	F3	57	33
	32	05	2484	09B4	E6	F4	57	34
	32	06	2485	09B5	E6	F5	57	35
	32	07	2486	09B6	E6	F6	57	36
	32	08	2487	09B7	E6	F7	57	37
	32	09	2488	09B8	E6	F8	57	38
	32	10	2489	09B9	E6	F9	57	39
	32	11	2490	09BA	E6	7A	57	3A
	32	12	2491	09BB	E6	7B	57	23
	32	13	2492	09BC	E6	7C	57	40
	32	14	2493	09BD	E6	7D	57	27
	32	15	2494	09BE	E6	7E	57	3D
	32	16	2495	09BF	E6	7F	57	22
	32	17	2496	09C0	E7	40	58	20
	32	18	2497	09C1	E7	C1	58	41
	32	19	2498	09C2	E7	C2	58	42
	32	20	2499	09C3	E7	C3	58	43
	32	21	2500	09C4	E7	C4	58	44
	32	22	2501	09C5	E7	C5	58	45
	32	23	2502	09C6	E7	C6	58	46
	32	24	2503	09C7	E7	C7	58	47
	32	25	2504	09C8	E7	C8	58	48
	32	26	2505	09C9	E7	C9	58	49
	32	27	2506	09CA	E7	4A	58	5B
	32	28	2507	09CB	E7	4B	58	2E
	32	29	2508	09CC	E7	4C	58	3C
	32	30	2509	09CD	E7	4D	58	28
	32	31	2510	09CE	E7	4E	58	2B
	32	32	2511	09CF	E7	4F	58	21
	32	33	2512	09D0	E7	50	58	26
	32	34	2513	09D1	E7	D1	58	4A
	32	35	2514	09D2	E7	D2	58	4B
	32	36	2515	09D3	E7	D3	58	4C
	32	37	2516	09D4	E7	D4	58	4D
	32	38	2517	09D5	E7	D5	58	4E
	32	39	2518	09D6	E7	D6	58	4F
	32	40	2519	09D7	E7	D7	58	50
	32	41	2520	09D8	E7	D8	58	51
	32	42	2521	09D9	E7	D9	58	52
	32	43	2522	09DA	E7	5A	58	5D
	32	44	2523	09DB	E7	5B	58	24
	32	45	2524	09DC	E7	5C	58	2A
	32	46	2525	09DD	E7	5D	58	29
	32	47	2526	09DE	E7	5E	58	3B
	32	48	2527	09DF	E7	5F	58	5E
	32	49	2528	09E0	E7	60	58	2D
	32	50	2529	09E1	E7	61	58	2F
	32	51	2530	09E2	E7	E2	58	53
	32	52	2531	09E3	E7	E3	58	54
	32	53	2532	09E4	E7	E4	58	55
	32	54	2533	09E5	E7	E5	58	56
	32	55	2534	09E6	E7	E6	58	57
	32	56	2535	09E7	E7	E7	58	58
	32	57	2536	09E8	E7	E8	58	59
	32	58	2537	09E9	E7	E9	58	5A
	32	59	2538	09EA	E7	6A	58	7C
	32	60	2539	09EB	E7	6B	58	2C
	32	61	2540	09EC	E7	6C	58	25
	32	62	2541	09ED	E7	6D	58	5F

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
32	63			2542	09FE	E7	6E	58	3E
32	64			2543	09EF	E7	6F	58	3F
32	65			2544	09F0	E7	F0	58	30
32	66			2545	09F1	E7	F1	58	31
32	67			2546	09F2	F7	F2	58	32
32	68			2547	09F3	E7	F3	58	33
32	69			2548	09F4	E7	F4	58	34
32	70			2549	09F5	E7	F5	58	35
32	71			2550	09F6	E7	F6	58	36
32	72			2551	09F7	E7	F7	58	37
32	73			2552	09F8	E7	F8	58	38
32	74			2553	09F9	E7	F9	58	39
32	75			2554	09FA	E7	7A	58	3A
32	76			2555	09FB	E7	7B	58	23
32	77			2556	09FC	E7	7C	58	40
32	78			2557	09FD	E7	7D	58	27
32	79			2558	09FE	E7	7E	58	3D
32	80			2559	09FF	E7	7F	58	22
33	01			2560	0A00	E8	40	59	20
33	02			2561	0A01	E8	C1	59	41
33	03			2562	0A02	E8	C2	59	42
33	04			2563	0A03	E8	C3	59	43
33	05			2564	0A04	E8	C4	59	44
33	06			2565	0A05	E8	C5	59	45
33	07			2566	0A06	E8	C6	59	46
33	08			2567	0A07	E8	C7	59	47
33	09			2568	0A08	E8	C8	59	48
33	10			2569	0A09	E8	C9	59	49
33	11			2570	0A0A	E8	4A	59	5B
33	12			2571	0A0B	E8	4B	59	2E
33	13			2572	0A0C	E8	4C	59	3C
33	14			2573	0A0D	E8	4D	59	28
33	15			2574	0A0E	E8	4E	59	2B
33	16			2575	0A0F	E8	4F	59	21
33	17			2576	0A10	E8	50	59	26
33	18			2577	0A11	E8	D1	59	4A
33	19			2578	0A12	E8	D2	59	4B
33	20			2579	0A13	E8	D3	59	4C
33	21			2580	0A14	E8	D4	59	4D
33	22			2581	0A15	E8	D5	59	4E
33	23			2582	0A16	E8	D6	59	4F
33	24			2583	0A17	E8	D7	59	50
33	25			2584	0A18	E8	D8	59	51
33	26			2585	0A19	E8	D9	59	52
33	27			2586	0A1A	E8	5A	59	5D
33	28			2587	0A1B	E8	5B	59	24
33	29			2588	0A1C	E8	5C	59	2A
33	30			2589	0A1D	E8	5D	59	29
33	31			2590	0A1E	E8	5E	59	3B
33	32			2591	0A1F	E8	5F	59	5E
33	33			2592	0A20	E8	60	59	2D
33	34			2593	0A21	E8	61	59	2F
33	35			2594	0A22	E8	E2	59	53
33	36			2595	0A23	E8	E3	59	54
33	37			2596	0A24	E8	E4	59	55
33	38			2597	0A25	E8	E5	59	56
33	39			2598	0A26	E8	E6	59	57
33	40			2599	0A27	E8	E7	59	58
33	41			2600	0A28	E8	E8	59	59
33	42			2601	0A29	E8	E9	59	5A
33	43			2602	0A2A	E8	6A	59	7C
33	44			2603	0A2B	E8	6B	59	2C

Mod 1	Mods 2,3,4		Position		Buffer Address (Hex)			
	R	C	Dec	Hex	EBCDIC	ASCII		
	33	45	2604	0A2C	E8	6C	59	25
	33	46	2605	0A2D	E8	6D	59	5F
	33	47	2606	0A2E	E8	6E	59	3E
	33	48	2607	0A2F	E8	6F	59	3F
	33	49	2608	0A30	E8	F0	59	30
	33	50	2609	0A31	E8	F1	59	31
	33	51	2610	0A32	E8	F2	59	32
	33	52	2611	0A33	E8	F3	59	33
	33	53	2612	0A34	E8	F4	59	34
	33	54	2613	0A35	E8	F5	59	35
	33	55	2614	0A36	E8	F6	59	36
	33	56	2615	0A37	E8	F7	59	37
	33	57	2616	0A38	E8	F8	59	38
	33	58	2617	0A39	E8	F9	59	39
	33	59	2618	0A3A	E8	7A	59	3A
	33	60	2619	0A3B	E8	7B	59	23
	33	61	2620	0A3C	E8	7C	59	40
	33	62	2621	0A3D	E8	7D	59	27
	33	63	2622	0A3E	E8	7E	59	3D
	33	64	2623	0A3F	E8	7F	59	22
	33	65	2624	0A40	E9	40	5A	20
	33	66	2625	0A41	E9	C1	5A	41
	33	67	2626	0A42	E9	C2	5A	42
	33	68	2627	0A43	E9	C3	5A	43
	33	69	2628	0A44	E9	C4	5A	44
	33	70	2629	0A45	E9	C5	5A	45
	33	71	2630	0A46	E9	C6	5A	46
	33	72	2631	0A47	E9	C7	5A	47
	33	73	2632	0A48	E9	C8	5A	48
	33	74	2633	0A49	E9	C9	5A	49
	33	75	2634	0A4A	E9	4A	5A	5B
	33	76	2635	0A4B	E9	4B	5A	2E
	33	77	2636	0A4C	E9	4C	5A	3C
	33	78	2637	0A4D	E9	4D	5A	28
	33	79	2638	0A4E	E9	4E	5A	2B
	33	80	2639	0A4F	E9	4F	5A	21
	34	01	2640	0A50	E9	50	5A	26
	34	02	2641	0A51	E9	D1	5A	4A
	34	03	2642	0A52	E9	D2	5A	4B
	34	04	2643	0A53	E9	D3	5A	4C
	34	05	2644	0A54	E9	D4	5A	4D
	34	06	2645	0A55	E9	D5	5A	4E
	34	07	2646	0A56	E9	D6	5A	4F
	34	08	2647	0A57	E9	D7	5A	50
	34	09	2648	0A58	E9	D8	5A	51
	34	10	2649	0A59	E9	D9	5A	52
	34	11	2650	0A5A	E9	5A	5A	5D
	34	12	2651	0A5B	E9	5B	5A	24
	34	13	2652	0A5C	E9	5C	5A	2A
	34	14	2653	0A5D	E9	5D	5A	29
	34	15	2654	0A5E	E9	5E	5A	3B
	34	16	2655	0A5F	E9	5F	5A	5E
	34	17	2656	0A60	E9	60	5A	2D
	34	18	2657	0A61	E9	61	5A	2F
	34	19	2658	0A62	E9	E2	5A	53
	34	20	2659	0A63	E9	E3	5A	54
	34	21	2660	0A64	E9	E4	5A	55
	34	22	2661	0A65	E9	E5	5A	56
	34	23	2662	0A66	E9	E6	5A	57
	34	24	2663	0A67	E9	E7	5A	58
	34	25	2664	0A68	E9	E8	5A	59
	34	26	2665	0A69	E9	E9	5A	5A

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>	<u>ASCII</u>		
34	27			2666	0A6A	E9	6A	5A	7C
34	28			2667	0A6B	E9	6B	5A	2C
34	29			2668	0A6C	E9	6C	5A	25
34	30			2669	0A6D	E9	6D	5A	5F
34	31			2670	0A6E	E9	6E	5A	3E
34	32			2671	0A6F	E9	6F	5A	3F
34	33			2672	0A70	E9	F0	5A	30
34	34			2673	0A71	E9	F1	5A	31
34	35			2674	0A72	E9	F2	5A	32
34	36			2675	0A73	E9	F3	5A	33
34	37			2676	0A74	E9	F4	5A	34
34	38			2677	0A75	E9	F5	5A	35
34	39			2678	0A76	E9	F6	5A	36
34	40			2679	0A77	E9	F7	5A	37
34	41			2680	0A78	E9	F8	5A	38
34	42			2681	0A79	E9	F9	5A	39
34	43			2682	0A7A	E9	7A	5A	3A
34	44			2683	0A7B	E9	7B	5A	23
34	45			2684	0A7C	E9	7C	5A	40
34	46			2685	0A7D	E9	7D	5A	27
34	47			2686	0A7E	E9	7E	5A	3D
34	48			2687	0A7E	E9	7F	5A	22
34	49			2688	0A80	6A	40	7C	20
34	50			2689	0A81	6A	C1	7C	41
34	51			2690	0A82	6A	C2	7C	42
34	52			2691	0A83	6A	C3	7C	43
34	53			2692	0A84	6A	C4	7C	44
34	54			2693	0A85	6A	C5	7C	45
34	55			2694	0A86	6A	C6	7C	46
34	56			2695	0A87	6A	C7	7C	47
34	57			2696	0A88	6A	C8	7C	48
34	58			2697	0A89	6A	C9	7C	49
34	59			2698	0A8A	6A	4A	7C	5B
34	60			2699	0A8B	6A	4B	7C	2E
34	61			2700	0A8C	6A	4C	7C	3C
34	62			2701	0A8D	6A	4D	7C	28
34	63			2702	0A8E	6A	4E	7C	2B
34	64			2703	0A8F	6A	4F	7C	21
34	65			2704	0A90	6A	50	7C	26
34	66			2705	0A91	6A	D1	7C	4A
34	67			2706	0A92	6A	D2	7C	4B
34	68			2707	0A93	6A	D3	7C	4C
34	69			2708	0A94	6A	D4	7C	4D
34	70			2709	0A95	6A	D5	7C	4E
34	71			2710	0A96	6A	D6	7C	4F
34	72			2711	0A97	6A	D7	7C	50
34	73			2712	0A98	6A	D8	7C	51
34	74			2713	0A99	6A	D9	7C	52
34	75			2714	0A9A	6A	5A	7C	5D
34	76			2715	0A9B	6A	5B	7C	24
34	77			2716	0A9C	6A	5C	7C	2A
34	78			2717	0A9D	6A	5D	7C	29
34	79			2718	0A9E	6A	5E	7C	3B
34	80			2719	0A9F	6A	5F	7C	5E
35	01			2720	0AA0	6A	60	7C	2D
35	02			2721	0AA1	6A	61	7C	2F
35	03			2722	0AA2	6A	E2	7C	53
35	04			2723	0AA3	6A	E3	7C	54
35	05			2724	0AA4	6A	E4	7C	55
35	06			2725	0AA5	6A	E5	7C	56
35	07			2726	0AA6	6A	E6	7C	57
35	08			2727	0AA7	6A	E7	7C	58

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
35	09			2728	0AA8	6A	E8	7C	59
35	10			2729	0AA9	6A	E9	7C	5A
35	11			2730	0AAA	6A	6A	7C	7C
35	12			2731	0AAB	6A	6B	7C	2C
35	13			2732	0AAC	6A	6C	7C	25
35	14			2733	0AAD	6A	6D	7C	5F
35	15			2734	0AAE	6A	6E	7C	3E
35	16			2735	0AAF	6A	6F	7C	3F
35	17			2736	0AB0	6A	F0	7C	30
35	18			2737	0AB1	6A	F1	7C	31
35	19			2738	0AB2	6A	F2	7C	32
35	20			2739	0AB3	6A	F3	7C	33
35	21			2740	0AB4	6A	F4	7C	34
35	22			2741	0AB5	6A	F5	7C	35
35	23			2742	0AB6	6A	F6	7C	36
35	24			2743	0AB7	6A	F7	7C	37
35	25			2744	0AB8	6A	F8	7C	38
35	26			2745	0AB9	6A	F9	7C	39
35	27			2746	0ABA	6A	7A	7C	3A
35	28			2747	0ABB	6A	7B	7C	23
35	29			2748	0ABC	6A	7C	7C	40
35	30			2749	0ABD	6A	7D	7C	27
35	31			2750	0ABE	6A	7F	7C	3D
35	32			2751	0ABF	6A	7F	7C	22
35	33			2752	0AC0	6B	40	2C	20
35	34			2753	0AC1	6B	C1	2C	41
35	35			2754	0AC2	6B	C2	2C	42
35	36			2755	0AC3	6B	C3	2C	43
35	37			2756	0AC4	6B	C4	2C	44
35	38			2757	0AC5	6B	C5	2C	45
35	39			2758	0AC6	6B	C6	2C	46
35	40			2759	0AC7	6B	C7	2C	47
35	41			2760	0AC8	6B	C8	2C	48
35	42			2761	0AC9	6B	C9	2C	49
35	43			2762	0ACA	6B	4A	2C	5B
35	44			2763	0ACB	6B	4B	2C	2E
35	45			2764	0ACC	6B	4C	2C	3C
35	46			2765	0ACD	6B	4D	2C	28
35	47			2766	0ACE	6B	4E	2C	2B
35	48			2767	0ACF	6B	4F	2C	21
35	49			2768	0AD0	6B	50	2C	26
35	50			2769	0AD1	6B	D1	2C	4A
35	51			2770	0AD2	6B	D2	2C	4B
35	52			2771	0AD3	6B	D3	2C	4C
35	53			2772	0AD4	6B	D4	2C	4D
35	54			2773	0AD5	6B	D5	2C	4E
35	55			2774	0AD6	6B	D6	2C	4F
35	56			2775	0AD7	6B	D7	2C	50
35	57			2776	0AD8	6B	D8	2C	51
35	58			2777	0AD9	6B	D9	2C	52
35	59			2778	0ADA	6B	5A	2C	5D
35	60			2779	0ADB	6B	5B	2C	24
35	61			2780	0ADC	6B	5C	2C	2A
35	62			2781	0ADD	6B	5D	2C	29
35	63			2782	0ADE	6B	5E	2C	3B
35	64			2783	0ADF	6B	5F	2C	5E
35	65			2784	0AE0	6B	60	2C	2D
35	66			2785	0AE1	6B	61	2C	2F
35	67			2786	0AE2	6B	E2	2C	53
35	68			2787	0AE3	6B	E3	2C	54
35	69			2788	0AE4	6B	E4	2C	55
35	70			2789	0AE5	6B	E5	2C	56

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
35	71			2790	0AE6	6B	E6	2C	57
35	72			2791	0AE7	6B	E7	2C	58
35	73			2792	0AE8	6B	E8	2C	59
35	74			2793	0AE9	6B	E9	2C	5A
35	75			2794	0AEA	6B	6A	2C	7C
35	76			2795	0AEB	6B	6B	2C	2C
35	77			2796	0AEC	6B	6C	2C	25
35	78			2797	0AED	6B	6D	2C	5F
35	79			2798	0AEE	6B	6E	2C	3E
35	80			2799	0AEF	6B	6F	2C	3F
36	01			2800	0AF0	6B	F0	2C	30
36	02			2801	0AF1	6B	F1	2C	31
36	03			2802	0AF2	6B	F2	2C	32
36	04			2803	0AF3	6B	F3	2C	33
36	05			2804	0AF4	6B	F4	2C	34
36	06			2805	0AF5	6B	F5	2C	35
36	07			2806	0AF6	6B	F6	2C	36
36	08			2807	0AF7	6B	F7	2C	37
36	09			2808	0AF8	6B	F8	2C	38
36	10			2809	0AF9	6B	F9	2C	39
36	11			2810	0AFA	6B	7A	2C	3A
36	12			2811	0AFB	6B	7B	2C	23
36	13			2812	0AFC	6B	7C	2C	40
36	14			2813	0AFD	6B	7D	2C	27
36	15			2814	0AFE	6B	7E	2C	3D
36	16			2815	0AFF	6B	7F	2C	22
36	17			2816	0B00	6C	40	25	20
36	18			2817	0B01	6C	C1	25	41
36	19			2818	0B02	6C	C2	25	42
36	20			2819	0B03	6C	C3	25	43
36	21			2820	0B04	6C	C4	25	44
36	22			2821	0B05	6C	C5	25	45
36	23			2822	0B06	6C	C6	25	46
36	24			2823	0B07	6C	C7	25	47
36	25			2824	0B08	6C	C8	25	48
36	26			2825	0B09	6C	C9	25	49
36	27			2826	0B0A	6C	4A	25	5B
36	28			2827	0B0B	6C	4B	25	2E
36	29			2828	0B0C	6C	4C	25	3C
36	30			2829	0B0D	6C	4D	25	28
36	31			2830	0B0E	6C	4E	25	2B
36	32			2831	0B0F	6C	4F	25	21
36	33			2832	0B10	6C	50	25	26
36	34			2833	0B11	6C	D1	25	4A
36	35			2834	0B12	6C	D2	25	4B
36	36			2835	0B13	6C	D3	25	4C
36	37			2836	0B14	6C	D4	25	4D
36	38			2837	0B15	6C	D5	25	4E
36	39			2838	0B16	6C	D6	25	4F
36	40			2839	0B17	6C	D7	25	50
36	41			2840	0B18	6C	D8	25	51
36	42			2841	0B19	6C	D9	25	52
36	43			2842	0B1A	6C	5A	25	5D
36	44			2843	0B1B	6C	5B	25	24
36	45			2844	0B1C	6C	5C	25	2A
36	46			2845	0B1D	6C	5D	25	29
36	47			2846	0B1E	6C	5E	25	3B
36	48			2847	0B1F	6C	5F	25	5E
36	49			2848	0B20	6C	60	25	2D
36	50			2849	0B21	6C	61	25	2F
36	51			2850	0B22	6C	E2	25	53
36	52			2851	0B23	6C	E3	25	54

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC	ASCII		
36	53			2852	0B24	6C	E4	25	55
36	54			2853	0B25	6C	E5	25	56
36	55			2854	0B26	6C	E6	25	57
36	56			2855	0B27	6C	E7	25	58
36	57			2856	0B28	6C	E8	25	59
36	58			2857	0B29	6C	E9	25	5A
36	59			2858	0B2A	6C	6A	25	7C
36	60			2859	0B2B	6C	6B	25	2C
36	61			2860	0B2C	6C	6C	25	25
36	62			2861	0B2D	6C	6D	25	5F
36	63			2862	0B2E	6C	6E	25	3E
36	64			2863	0B2F	6C	6F	25	3F
36	65			2864	0B30	6C	F0	25	30
36	66			2865	0B31	6C	F1	25	31
36	67			2866	0B32	6C	F2	25	32
36	68			2867	0B33	6C	F3	25	33
36	69			2868	0B34	6C	F4	25	34
36	70			2869	0B35	6C	F5	25	35
36	71			2870	0B36	6C	F6	25	36
36	72			2871	0B37	6C	F7	25	37
36	73			2872	0B38	6C	F8	25	38
36	74			2873	0B39	6C	F9	25	39
36	75			2874	0B3A	6C	7A	25	3A
36	76			2875	0B3B	6C	7B	25	23
36	77			2876	0B3C	6C	7C	25	40
36	78			2877	0B3D	6C	7D	25	27
36	79			2878	0B3E	6C	7E	25	3D
36	80			2879	0B3F	6C	7F	25	22
37	01			2880	0B40	6D	40	5F	20
37	02			2881	0B41	6D	C1	5F	41
37	03			2882	0B42	6D	C2	5F	42
37	04			2883	0B43	6D	C3	5F	43
37	05			2884	0B44	6D	C4	5F	44
37	06			2885	0B45	6D	C5	5F	45
37	07			2886	0B46	6D	C6	5F	46
37	08			2887	0B47	6D	C7	5F	47
37	09			2888	0B48	6D	C8	5F	48
37	10			2889	0B49	6D	C9	5F	49
37	11			2890	0B4A	6D	4A	5F	5B
37	12			2891	0B4B	6D	4B	5F	2E
37	13			2892	0B4C	6D	4C	5F	3C
37	14			2893	0B4D	6D	4D	5F	28
37	15			2894	0B4E	6D	4E	5F	2B
37	16			2895	0B4F	6D	4F	5F	21
37	17			2896	0B50	6D	50	5F	26
37	18			2897	0B51	6D	D1	5F	4A
37	19			2898	0B52	6D	D2	5F	4B
37	20			2899	0B53	6D	D3	5F	4C
37	21			2900	0B54	6D	D4	5F	4D
37	22			2901	0B55	6D	D5	5F	4E
37	23			2902	0B56	6D	D6	5F	4F
37	24			2903	0B57	6D	D7	5F	50
37	25			2904	0B58	6D	D8	5F	51
37	26			2905	0B59	6D	D9	5F	52
37	27			2906	0B5A	6D	5A	5F	5D
37	28			2907	0B5B	6D	5B	5F	24
37	29			2908	0B5C	6D	5C	5F	2A
37	30			2909	0B5D	6D	5D	5F	29
37	31			2910	0B5E	6D	5E	5F	3B
37	32			2911	0B5F	6D	5F	5F	5E
37	33			2912	0B60	6D	60	5F	2D
37	34			2913	0B61	6D	61	5F	2F

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
37	35			2914	0B62	6D	E2	5F	53
37	36			2915	0B63	6D	E3	5F	54
37	37			2916	0B64	6D	E4	5F	55
37	38			2917	0B65	6D	E5	5F	56
37	39			2918	0B66	6D	E6	5F	57
37	40			2919	0B67	6D	E7	5F	58
37	41			2920	0B68	6D	E8	5F	59
37	42			2921	0B69	6D	E9	5F	5A
37	43			2922	0B6A	6D	6A	5F	7C
37	44			2923	0B6B	6D	6B	5F	2C
37	45			2924	0B6C	6D	6C	5F	25
37	46			2925	0B6D	6D	6D	5F	5F
37	47			2926	0B6E	6D	6E	5F	3E
37	48			2927	0B6F	6D	6F	5F	3F
37	49			2928	0B70	6D	F0	5F	30
37	50			2929	0B71	6D	F1	5F	31
37	51			2930	0B72	6D	F2	5F	32
37	52			2931	0B73	6D	F3	5F	33
37	53			2932	0B74	6D	F4	5F	34
37	54			2933	0B75	6D	F5	5F	35
37	55			2934	0B76	6D	F6	5F	36
37	56			2935	0B77	6D	F7	5F	37
37	57			2936	0B78	6D	F8	5F	38
37	58			2937	0B79	6D	F9	5F	39
37	59			2938	0B7A	6D	7A	5F	3A
37	60			2939	0B7B	6D	7B	5F	23
37	61			2940	0B7C	6D	7C	5F	40
37	62			2941	0B7D	6D	7D	5F	27
37	63			2942	0B7E	6D	7E	5F	3D
37	64			2943	0B7F	6D	7F	5F	22
37	65			2944	0B80	6E	40	3E	20
37	66			2945	0B81	6E	C1	3E	41
37	67			2946	0B82	6E	C2	3E	42
37	68			2947	0B83	6E	C3	3E	43
37	69			2948	0B84	6E	C4	3E	44
37	70			2949	0B85	6E	C5	3E	45
37	71			2950	0B86	6E	C6	3E	46
37	72			2951	0B87	6E	C7	3E	47
37	73			2952	0B88	6E	C8	3E	48
37	74			2953	0B89	6E	C9	3E	49
37	75			2954	0B8A	6E	4A	3E	5B
37	76			2955	0B8B	6E	4B	3E	2E
37	77			2956	0B8C	6E	4C	3E	3C
37	78			2957	0B8D	6E	4D	3E	28
37	79			2958	0B8E	6E	4E	3E	2B
37	80			2959	0B8F	6E	4F	3E	21
38	01			2960	0B90	6E	50	3E	26
38	02			2961	0B91	6E	D1	3E	4A
38	03			2962	0B92	6E	D2	3E	4B
38	04			2963	0B93	6E	D3	3E	4C
38	05			2964	0B94	6E	D4	3E	4D
38	06			2965	0B95	6E	D5	3E	4E
38	07			2966	0B96	6E	D6	3E	4F
38	08			2967	0B97	6E	D7	3E	50
38	09			2968	0B98	6E	D8	3E	51
38	10			2969	0B99	6E	D9	3E	52
38	11			2970	0B9A	6E	5A	3E	5D
38	12			2971	0B9B	6E	5B	3E	24
38	13			2972	0B9C	6E	5C	3E	2A
38	14			2973	0B9D	6E	5D	3E	29
38	15			2974	0B9E	6E	5E	3E	3B
38	16			2975	0B9F	6E	5F	3E	5E

Mod 1 R C	Mods 2,3,4 R C	Position		Buffer Address (Hex)			
		Dec	Hex	EBCDIC		ASCII	
	38 17	2976	OBA0	6E	60	3E	2D
	38 18	2977	OBA1	6E	61	3E	2F
	38 19	2978	OBA2	6E	E2	3E	53
	38 20	2979	OBA3	6E	E3	3E	54
	38 21	2980	OBA4	6E	E4	3E	55
	38 22	2981	OBA5	6E	E5	3E	56
	38 23	2982	OBA6	6E	E6	3E	57
	38 24	2983	OBA7	6E	E7	3E	58
	38 25	2984	OBA8	6E	E8	3E	59
	38 26	2985	OBA9	6E	E9	3E	5A
	38 27	2986	OBAA	6E	6A	3E	7C
	38 28	2987	OBAB	6E	6B	3E	2C
	38 29	2988	OBAC	6E	6C	3E	25
	38 30	2989	OBAD	6E	6D	3E	5F
	38 31	2990	OBAE	6E	6E	3E	3E
	38 32	2991	OBAF	6E	6F	3E	3F
	38 33	2992	OBB0	6E	F0	3E	30
	38 34	2993	OBB1	6E	F1	3E	31
	38 35	2994	OBB2	6E	F2	3E	32
	38 36	2995	OBB3	6E	F3	3E	33
	38 37	2996	OBB4	6E	F4	3E	34
	38 38	2997	OBB5	6E	F5	3E	35
	38 39	2998	OBB6	6E	F6	3E	36
	38 40	2999	OBB7	6E	F7	3E	37
	38 41	3000	OBB8	6E	F8	3E	38
	38 42	3001	OBB9	6E	F9	3E	39
	38 43	3002	OBBA	6E	7A	3E	3A
	38 44	3003	OBBA	6E	7B	3E	23
	38 45	3004	OBBC	6E	7C	3E	40
	38 46	3005	OBBD	6E	7D	3E	27
	38 47	3006	OBBE	6E	7E	3E	3D
	38 48	3007	OBBF	6E	7F	3E	22
	38 49	3008	OBC0	6F	40	3F	20
	38 50	3009	OBC1	6F	C1	3F	41
	38 51	3010	OBC2	6F	C2	3F	42
	38 52	3011	OBC3	6F	C3	3F	43
	38 53	3012	OBC4	6F	C4	3F	44
	38 54	3013	OBC5	6F	C5	3F	45
	38 55	3014	OBC6	6F	C6	3F	46
	38 56	3015	OBC7	6F	C7	3F	47
	38 57	3016	OBC8	6F	C8	3F	48
	38 58	3017	OBC9	6F	C9	3F	49
	38 59	3018	OBCA	6F	4A	3F	5B
	38 60	3019	OBCB	6F	4B	3F	2E
	38 61	3020	OBCC	6F	4C	3F	3C
	38 62	3021	OBCD	6F	4D	3F	28
	38 63	3022	OBCE	6F	4E	3F	2B
	38 64	3023	OBCF	6F	4F	3F	21
	38 65	3024	OBD0	6F	50	3F	26
	38 66	3025	OBD1	6F	D1	3F	4A
	38 67	3026	OBD2	6F	D2	3F	4B
	38 68	3027	OBD3	6F	D3	3F	4C
	38 69	3028	OBD4	6F	D4	3F	4D
	38 70	3029	OBD5	6F	D5	3F	4E
	38 71	3030	OBD6	6F	D6	3F	4F
	38 72	3031	OBD7	6F	D7	3F	50
	38 73	3032	OBD8	6F	D8	3F	51
	38 74	3033	OBD9	6F	D9	3F	52
	38 75	3034	OBDA	6F	5A	3F	5D
	38 76	3035	OBDB	6F	5B	3F	24
	38 77	3036	OBDC	6F	5C	3F	2A
	38 78	3037	OBDD	6F	5D	3F	29

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
38	79			3038	0BDE	6F	5E	3F	3B
38	80			3039	0BDF	6F	5F	3F	5E
39	01			3040	0BE0	6F	60	3F	2D
39	02			3041	0BE1	6F	61	3F	2F
39	03			3042	0BE2	6F	E2	3F	53
39	04			3043	0BE3	6F	E3	3F	54
39	05			3044	0BE4	6F	E4	3F	55
39	06			3045	0BE5	6F	E5	3F	56
39	07			3046	0BE6	6F	E6	3F	57
39	08			3047	0BE7	6F	E7	3F	58
39	09			3048	0BE8	6F	E8	3F	59
39	10			3049	0BE9	6F	E9	3F	5A
39	11			3050	0BEA	6F	6A	3F	7C
39	12			3051	0BEB	6F	6B	3F	2C
39	13			3052	0BEC	6F	6C	3F	25
39	14			3053	0BED	6F	6D	3F	5F
39	15			3054	0BEF	6F	6E	3F	3E
39	16			3055	0BEF	6F	6F	3F	3F
39	17			3056	0BF0	6F	F0	3F	30
39	18			3057	0BF1	6F	F1	3F	31
39	19			3058	0BF2	6F	F2	3F	32
39	20			3059	0BF3	6F	F3	3F	33
39	21			3060	0BF4	6F	F4	3F	34
39	22			3061	0BF5	6F	F5	3F	35
39	23			3062	0BF6	6F	F6	3F	36
39	24			3063	0BF7	6F	F7	3F	37
39	25			3064	0BF8	6F	F8	3F	38
39	26			3065	0BF9	6F	F9	3F	39
39	27			3066	0BFA	6F	7A	3F	3A
39	28			3067	0BFB	6F	7B	3F	23
39	29			3068	0BFC	6F	7C	3F	40
39	30			3069	0BFD	6F	7D	3F	27
39	31			3070	0BFE	6F	7E	3F	3D
39	32			3071	0BFF	6F	7F	3F	22
39	33			3072	0C00	F0	40	30	20
39	34			3073	0C01	F0	C1	30	41
39	35			3074	0C02	F0	C2	30	42
39	36			3075	0C03	F0	C3	30	43
39	37			3076	0C04	F0	C4	30	44
39	38			3077	0C05	F0	C5	30	45
39	39			3078	0C06	F0	C6	30	46
39	40			3079	0C07	F0	C7	30	47
39	41			3080	0C08	F0	C8	30	48
39	42			3081	0C09	F0	C9	30	49
39	43			3082	0C0A	F0	4A	30	5B
39	44			3083	0C0B	F0	4B	30	2E
39	45			3084	0C0C	F0	4C	30	3C
39	46			3085	0C0D	F0	4D	30	28
39	47			3086	0C0E	F0	4E	30	2B
39	48			3087	0C0F	F0	4F	30	21
39	49			3088	0C10	F0	50	30	26
39	50			3089	0C11	F0	D1	30	4A
39	51			3090	0C12	F0	D2	30	4B
39	52			3091	0C13	F0	D3	30	4C
39	53			3092	0C14	F0	D4	30	4D
39	54			3093	0C15	F0	D5	30	4E
39	55			3094	0C16	F0	D6	30	4F
39	56			3095	0C17	F0	D7	30	50
39	57			3096	0C18	F0	D8	30	51
39	58			3097	0C19	F0	D9	30	52
39	59			3098	0C1A	F0	5A	30	5D
39	60			3099	0C1B	F0	5B	30	24

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
39	61			3100	0C1C	F0	5C	30	2A
39	62			3101	0C1D	F0	5D	30	29
39	63			3102	0C1E	F0	5E	30	3B
39	64			3103	0C1F	F0	5F	30	5E
39	65			3104	0C20	F0	60	30	2D
39	66			3105	0C21	F0	61	30	2F
39	67			3106	0C22	F0	E2	30	53
39	68			3107	0C23	F0	E3	30	54
39	69			3108	0C24	F0	E4	30	55
39	70			3109	0C25	F0	E5	30	56
39	71			3110	0C26	F0	E6	30	57
39	72			3111	0C27	F0	E7	30	58
39	73			3112	0C28	F0	E8	30	59
39	74			3113	0C29	F0	E9	30	5A
39	75			3114	0C2A	F0	6A	30	7C
39	76			3115	0C2B	F0	6B	30	2C
39	77			3116	0C2C	F0	6C	30	25
39	78			3117	0C2D	F0	6D	30	5F
39	79			3118	0C2E	F0	6E	30	3E
39	80			3119	0C2F	F0	6F	30	3F
40	01			3120	0C30	F0	F0	30	30
40	02			3121	0C31	F0	F1	30	31
40	03			3122	0C32	F0	F2	30	32
40	04			3123	0C33	F0	F3	30	33
40	05			3124	0C34	F0	F4	30	34
40	06			3125	0C35	F0	F5	30	35
40	07			3126	0C36	F0	F6	30	36
40	08			3127	0C37	F0	F7	30	37
40	09			3128	0C38	F0	F8	30	38
40	10			3129	0C39	F0	F9	30	39
40	11			3130	0C3A	F0	7A	30	3A
40	12			3131	0C3B	F0	7B	30	23
40	13			3132	0C3C	F0	7C	30	40
40	14			3133	0C3D	F0	7D	30	27
40	15			3134	0C3E	F0	7E	30	3D
40	16			3135	0C3F	F0	7F	30	22
40	17			3136	0C40	F1	40	31	20
40	18			3137	0C41	F1	C1	31	41
40	19			3138	0C42	F1	C2	31	42
40	20			3139	0C43	F1	C3	31	43
40	21			3140	0C44	F1	C4	31	44
40	22			3141	0C45	F1	C5	31	45
40	23			3142	0C46	F1	C6	31	46
40	24			3143	0C47	F1	C7	31	47
40	25			3144	0C48	F1	C8	31	48
40	26			3145	0C49	F1	C9	31	49
40	27			3146	0C4A	F1	4A	31	5B
40	28			3147	0C4B	F1	4B	31	2E
40	29			3148	0C4C	F1	4C	31	3C
40	30			3149	0C4D	F1	4D	31	28
40	31			3150	0C4E	F1	4E	31	2B
40	32			3151	0C4F	F1	4F	31	21
40	33			3152	0C50	F1	50	31	26
40	34			3153	0C51	F1	D1	31	4A
40	35			3154	0C52	F1	D2	31	4B
40	36			3155	0C53	F1	D3	31	4C
40	37			3156	0C54	F1	D4	31	4D
40	38			3157	0C55	F1	D5	31	4E
40	39			3158	0C56	F1	D6	31	4F
40	40			3159	0C57	F1	D7	31	50
40	41			3160	0C58	F1	D8	31	51
40	42			3161	0C59	F1	D9	31	52
40	43			3162	0C5A	F1	5A	31	5D

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
		40	44	3163	0C5B	F1	5B	31	24
		40	45	3164	0C5C	F1	5C	31	2A
		40	46	3165	0C5D	F1	5D	31	29
		40	47	3166	0C5E	F1	5E	31	3B
		40	48	3167	0C5F	F1	5F	31	5E
		40	49	3168	0C60	F1	60	31	2D
		40	50	3169	0C61	F1	61	31	2F
		40	51	3170	0C62	F1	E2	31	53
		40	52	3171	0C63	F1	E3	31	54
		40	53	3172	0C64	F1	E4	31	55
		40	54	3173	0C65	F1	E5	31	56
		40	55	3174	0C66	F1	E6	31	57
		40	56	3175	0C67	F1	E7	31	58
		40	57	3176	0C68	F1	E8	31	59
		40	58	3177	0C69	F1	E9	31	5A
		40	59	3178	0C6A	F1	6A	31	7C
		40	60	3179	0C6B	F1	6B	31	2C
		40	61	3180	0C6C	F1	6C	31	25
		40	62	3181	0C6D	F1	6D	31	5F
		40	63	3182	0C6E	F1	6E	31	3E
		40	64	3183	0C6F	F1	6F	31	3F
		40	65	3184	0C70	F1	F0	31	30
		40	66	3185	0C71	F1	F1	31	31
		40	67	3186	0C72	F1	F2	31	32
		40	68	3187	0C73	F1	F3	31	33
		40	69	3188	0C74	F1	F4	31	34
		40	70	3189	0C75	F1	F5	31	35
		40	71	3190	0C76	F1	F6	31	36
		40	72	3191	0C77	F1	F7	31	37
		40	73	3192	0C78	F1	F8	31	38
		40	74	3193	0C79	F1	F9	31	39
		40	75	3194	0C7A	F1	7A	31	3A
		40	76	3195	0C7B	F1	7B	31	23
		40	77	3196	0C7C	F1	7C	31	40
		40	78	3197	0C7D	F1	7D	31	27
		40	79	3198	0C7E	F1	7E	31	3D
		40	80	3199	0C7F	F1	7F	31	22
		41	01	3200	0C80	F2	40	32	20
		41	02	3201	0C81	F2	C1	32	41
		41	03	3202	0C82	F2	C2	32	42
		41	04	3203	0C83	F2	C3	32	43
		41	05	3204	0C84	F2	C4	32	44
		41	06	3205	0C85	F2	C5	32	45
		41	07	3206	0C86	F2	C6	32	46
		41	08	3207	0C87	F2	C7	32	47
		41	09	3208	0C88	F2	C8	32	48
		41	10	3209	0C89	F2	C9	32	49
		41	11	3210	0C8A	F2	4A	32	5B
		41	12	3211	0C8B	F2	4B	32	2E
		41	13	3212	0C8C	F2	4C	32	3C
		41	14	3213	0C8D	F2	4D	32	28
		41	15	3214	0C8E	F2	4E	32	2B
		41	16	3215	0C8F	F2	4F	32	21
		41	17	3216	0C90	F2	50	32	26
		41	18	3217	0C91	F2	D1	32	4A
		41	19	3218	0C92	F2	D2	32	4B
		41	20	3219	0C93	F2	D3	32	4C
		41	21	3220	0C94	F2	D4	32	4D
		41	22	3221	0C95	F2	D5	32	4E
		41	23	3222	0C96	F2	D6	32	4F
		41	24	3223	0C97	F2	D7	32	50
		41	25	3224	0C98	F2	D8	32	51
		41	26	3225	0C99	F2	D9	32	52

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
41	27			3226	0C9A	F2	5A	32	5D
41	28			3227	0C9B	F2	5B	32	24
41	29			3228	0C9C	F2	5C	32	2A
41	30			3229	0C9D	F2	5D	32	29
41	31			3230	0C9E	F2	3E	32	3B
41	32			3231	0C9F	F2	5F	32	5E
41	33			3232	0CA0	F2	60	32	2D
41	34			3233	0CA1	F2	61	32	2F
41	35			3234	0CA2	F2	E2	32	53
41	36			3235	0CA3	F2	E3	32	54
41	37			3236	0CA4	F2	E4	32	55
41	38			3237	0CA5	F2	E5	32	56
41	39			3238	0CA6	F2	E6	32	57
41	40			3239	0CA7	F2	E7	32	58
41	41			3240	0CA8	F2	E8	32	59
41	42			3241	0CA9	F2	E9	32	5A
41	43			3242	0CAA	F2	6A	32	7C
41	44			3243	0CAB	F2	6B	32	2C
41	45			3244	0CAC	F2	6C	32	25
41	46			3245	0CAD	F2	6D	32	5F
41	47			3246	0CAE	F2	6E	32	3E
41	48			3247	0CAF	F2	6F	32	3F
41	49			3248	0CB0	F2	F0	32	30
41	50			3249	0CB1	F2	F1	32	31
41	51			3250	0CB2	F2	F2	32	32
41	52			3251	0CB3	F2	F3	32	33
41	53			3252	0CB4	F2	F4	32	34
41	54			3253	0CB5	F2	F5	32	35
41	55			3254	0CB6	F2	F6	32	36
41	56			3255	0CB7	F2	F7	32	37
41	57			3256	0CB8	F2	F8	32	38
41	58			3257	0CB9	F2	F9	32	39
41	59			3258	0CBA	F2	7A	32	3A
41	60			3259	0CBB	F2	7B	32	23
41	61			3260	0CBC	F2	7C	32	40
41	62			3261	0CBD	F2	7D	32	27
41	63			3262	0CBE	F2	7E	32	3D
41	64			3263	0CBF	F2	7F	32	22
41	65			3264	0CC0	F3	40	33	20
41	66			3265	0CC1	F3	C1	33	41
41	67			3266	0CC2	F3	C2	33	42
41	68			3267	0CC3	F3	C3	33	43
41	69			3268	0CC4	F3	C4	33	44
41	70			3269	0CC5	F3	C5	33	45
41	71			3270	0CC6	F3	C6	33	46
41	72			3271	0CC7	F3	C7	33	47
41	73			3272	0CC8	F3	C8	33	48
41	74			3273	0CC9	F3	C9	33	49
41	75			3274	0CCA	F3	4A	33	5B
41	76			3275	0CCB	F3	4B	33	2E
41	77			3276	0CCC	F3	4C	33	3C
41	78			3277	0CCD	F3	4D	33	28
41	79			3278	0CCE	F3	4E	33	2B
41	80			3279	0CCF	F3	4F	33	21
42	01			3280	0CD0	F3	50	33	26
42	02			3281	0CD1	F3	D1	33	4A
42	03			3282	0CD2	F3	D2	33	4B
42	04			3283	0CD3	F3	D3	33	4C
42	05			3284	0CD4	F3	D4	33	4D
42	06			3285	0CD5	F3	D5	33	4E
42	07			3286	0CD6	F3	D6	33	4F
42	08			3287	0CD7	F3	D7	33	50
42	09			3288	0CD8	F3	D8	33	51
42	10			3289	0CD9	F3	D9	33	52

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
		42	11	3290	0CDA	F3	5A	33	5D
		42	12	3291	0CDB	F3	5B	33	24
		42	13	3292	0CDC	F3	5C	33	2A
		42	14	3293	0CDD	F3	5D	33	29
		42	15	3294	0CDE	F3	5E	33	3B
		42	16	3295	0CDF	F3	5F	33	5E
		42	17	3296	0CE0	F3	60	33	2D
		42	18	3297	0CE1	F3	61	33	2F
		42	19	3298	0CE2	F3	E2	33	53
		42	20	3299	0CE3	F3	E3	33	54
		42	21	3300	0CE4	F3	E4	33	55
		42	22	3301	0CE5	F3	E5	33	56
		42	23	3302	0CE6	F3	E6	33	57
		42	24	3303	0CE7	F3	E7	33	58
		42	25	3304	0CE8	F3	E8	33	59
		42	26	3305	0CE9	F3	E9	33	5A
		42	27	3306	0CEA	F3	6A	33	7C
		42	28	3307	0CEB	F3	6B	33	2C
		42	29	3308	0CEC	F3	6C	33	25
		42	30	3309	0CED	F3	6D	33	5F
		42	31	3310	0CEE	F3	6E	33	3E
		42	32	3311	0CEF	F3	6F	33	3F
		42	33	3312	0CF0	F3	F0	33	30
		42	34	3313	0CF1	F3	F1	33	31
		42	35	3314	0CF2	F3	F2	33	32
		42	36	3315	0CF3	F3	F3	33	33
		42	37	3316	0CF4	F3	F4	33	34
		42	38	3317	0CF5	F3	F5	33	35
		42	39	3318	0CF6	F3	F6	33	36
		42	40	3319	0CF7	F3	F7	33	37
		42	41	3320	0CF8	F3	F8	33	38
		42	42	3321	0CF9	F3	F9	33	39
		42	43	3322	0CFA	F3	7A	33	3A
		42	44	3323	0CFB	F3	7B	33	23
		42	45	3324	0CFC	F3	7C	33	40
		42	46	3325	0CFD	F3	7D	33	27
		42	47	3326	0CFE	F3	7E	33	3D
		42	48	3327	0CFF	F3	7F	33	22
		42	49	3328	0D00	F4	40	34	20
		42	50	3329	0D01	F4	C1	34	41
		42	51	3330	0D02	F4	C2	34	42
		42	52	3331	0D03	F4	C3	34	43
		42	53	3332	0D04	F4	C4	34	44
		42	54	3333	0D05	F4	C5	34	45
		42	55	3334	0D06	F4	C6	34	46
		42	56	3335	0D07	F4	C7	34	47
		42	57	3336	0D08	F4	C8	34	48
		42	58	3337	0D09	F4	C9	34	49
		42	59	3338	0D0A	F4	4A	34	5B
		42	60	3339	0D0B	F4	4B	34	2E
		42	61	3340	0D0C	F4	4C	34	3C
		42	62	3341	0D0D	F4	4D	34	28
		42	63	3342	0D0E	F4	4E	34	2B
		42	64	3343	0D0F	F4	4F	34	21
		42	65	3344	0D10	F4	50	34	26
		42	66	3345	0D11	F4	D1	34	4A
		42	67	3346	0D12	F4	D2	34	4B
		42	68	3347	0D13	F4	D3	34	4C
		42	69	3348	0D14	F4	D4	34	4D
		42	70	3349	0D15	F4	D5	34	4E
		42	71	3350	0D16	F4	D6	34	4F
		42	72	3351	0D17	F4	D7	34	50
		42	73	3352	0D18	F4	D8	34	51
		42	74	3353	0D19	F4	D9	34	52

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
R	C	R	C	Dec	Hex	EBCDIC		ASCII	
		42	75	3354	0D1A	F4	5A	34	5D
		42	76	3355	0D1B	F4	5B	34	24
		42	77	3356	0D1C	F4	5C	34	2A
		42	78	3357	0D1D	F4	5D	34	29
		42	79	3358	0D1E	F4	5E	34	3B
		42	80	3359	0D1F	F4	5F	34	5E
		43	01	3360	0D20	F4	60	34	2D
		43	02	3361	0D21	F4	61	34	2F
		43	03	3362	0D22	F4	E2	34	53
		43	04	3363	0D23	F4	E3	34	54
		43	05	3364	0D24	F4	E4	34	55
		43	06	3365	0D25	F4	E5	34	56
		43	07	3366	0D26	F4	E6	34	57
		43	08	3367	0D27	F4	E7	34	58
		43	09	3368	0D28	F4	E8	34	59
		43	10	3369	0D29	F4	E9	34	5A
		43	11	3370	0D2A	F4	6A	34	7C
		43	12	3371	0D2B	F4	6B	34	2C
		43	13	3372	0D2C	F4	6C	34	25
		43	14	3373	0D2D	F4	6D	34	5F
		43	15	3374	0D2E	F4	6E	34	3E
		43	16	3375	0D2F	F4	6F	34	3F
		43	17	3376	0D30	F4	F0	34	30
		43	18	3377	0D31	F4	F1	34	31
		43	19	3378	0D32	F4	F2	34	32
		43	20	3379	0D33	F4	F3	34	33
		43	21	3380	0D34	F4	F4	34	34
		43	22	3381	0D35	F4	F5	34	35
		43	23	3382	0D36	F4	F6	34	36
		43	24	3383	0D37	F4	F7	34	37
		43	25	3384	0D38	F4	F8	34	38
		43	26	3385	0D39	F4	F9	34	39
		43	27	3386	0D3A	F4	7A	34	3A
		43	28	3387	0D3B	F4	7B	34	23
		43	29	3388	0D3C	F4	7C	34	40
		43	30	3389	0D3D	F4	7D	34	27
		43	31	3390	0D3E	F4	7E	34	3D
		43	32	3391	0D3F	F4	7F	34	22
		43	33	3392	0D40	F5	40	35	20
		43	34	3393	0D41	F5	C1	35	41
		43	35	3394	0D42	F5	C2	35	42
		43	36	3395	0D43	F5	C3	35	43
		43	37	3396	0D44	F5	C4	35	44

Legend:

R = Row
C = Column

Mod 1		Mods 2,3,4		Position		Buffer Address (Hex)			
<u>R</u>	<u>C</u>	<u>R</u>	<u>C</u>	<u>Dec</u>	<u>Hex</u>	<u>EBCDIC</u>		<u>ASCII</u>	
43	38			3397	0D45	F5	C5	35	45
43	39			3398	0D46	F5	C6	35	46
43	40			3399	0D47	F5	C7	35	47
43	41			3400	0D48	F5	C8	35	48
43	42			3401	0D49	F5	C9	35	49
43	43			3402	0D4A	F5	4A	35	5B
43	44			3403	0D4B	F5	4B	35	2E
43	45			3404	0D4C	F5	4C	35	3C
43	46			3405	0D4D	F5	4D	35	28
43	47			3406	0D4E	F5	4E	35	2B
43	48			3407	0D4F	F5	4F	35	21
43	49			3408	0D50	F5	50	35	26
43	50			3409	0D51	F5	D1	35	4A
43	51			3410	0D52	F5	D2	35	4B
43	52			3411	0D53	F5	D3	35	4C
43	53			3412	0D54	F5	D4	35	4D
43	54			3413	0D55	F5	D5	35	4E
43	55			3414	0D56	F5	D6	35	4F
43	56			3415	0D57	F5	D7	35	50
43	57			3416	0D58	F5	D8	35	51
43	58			3417	0D59	F5	D9	35	52
43	59			3418	0D5A	F5	5A	35	5D
43	60			3419	0D5B	F5	5B	35	24
43	61			3420	0D5C	F5	5C	35	2A
43	62			3421	0D5D	F5	5D	35	29
43	63			3422	0D5E	F5	5E	35	3B
43	64			3423	0D5F	F5	5F	35	5E
43	65			3424	0D60	F5	60	35	2D
43	66			3425	0D61	F5	61	35	2F
43	67			3426	0D62	F5	E2	35	53
43	68			3427	0D63	F5	E3	35	54
43	69			3428	0D64	F5	E4	35	55
43	70			3429	0D65	F5	E5	35	56
43	71			3430	0D66	F5	E6	35	57
43	72			3431	0D67	F5	E7	35	58
43	73			3432	0D68	F5	E8	35	59
43	74			3433	0D69	F5	E9	35	5A
43	75			3434	0D6A	F5	6A	35	7C
43	76			3435	0D6B	F5	6B	35	2C
43	77			3436	0D6C	F5	6C	35	25
43	78			3437	0D6D	F5	6D	35	5F
43	79			3438	0D6E	F5	6E	35	3E
43	80			3439	0D6F	F5	6F	35	3F

3270 Information
Display System
Reference Summary

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GX20-1878-3

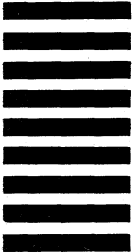
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