coord.

1 y 13 (6,1)

1 y 11 (6,3)

1 y

14 12 9 8 7 5 2 1

8 7 6 5 4 3 2 1

0 1 2 3 4 5 6 7

COL {13-13, 3-12, 11-11, 10-10, 6-9}

ROW {14(20)-8, 12(25)-7, 9(30)-6, 8(35)-5, 7(30)-4, 5(30)-3, 2(25)-2, 1(20)-1}

13 3 11 10 6

0 1 2 3 4

13 12 11 10 9

0 1 2 3 4

→ 13 3 11 10 6

DIC → GND

PIN 13, PIN 3, PIN 11, PIN 10, PIN 6

VCC → VCC

			COL 1	2	3	4	5			
2	0	+	9	0	0	0	0	0	1	→ PIN 9 → 2
0	1	+	14	0	0	0	0	0	2	→ PIN 14 → 11
3	2	+	8	0	0	0	0	0	3	→ PIN 8 → 6
1	3	−	12	0	0	0	0	0	4	→ PIN 12 → 7
5	4	+	5	0	0	0	0	0	5	→ PIN 5 → 3
7	5	−	1	0	0	0	0	0	6	→ PIN 1 → 16
4	6	+	7	0	0	0	0	0	7	→ PIN 7 → 5
6	7	+	2	0	0	0	0	0	8	→ PIN 2 → 8
								ROW		

22 14 16 20

9 14 8 12 5 1 7 2

0 1 2 3 4 5 6 7

8 7 6 5 9 3 2 1

DIN → 16

LOAD → 9

CLK → 8

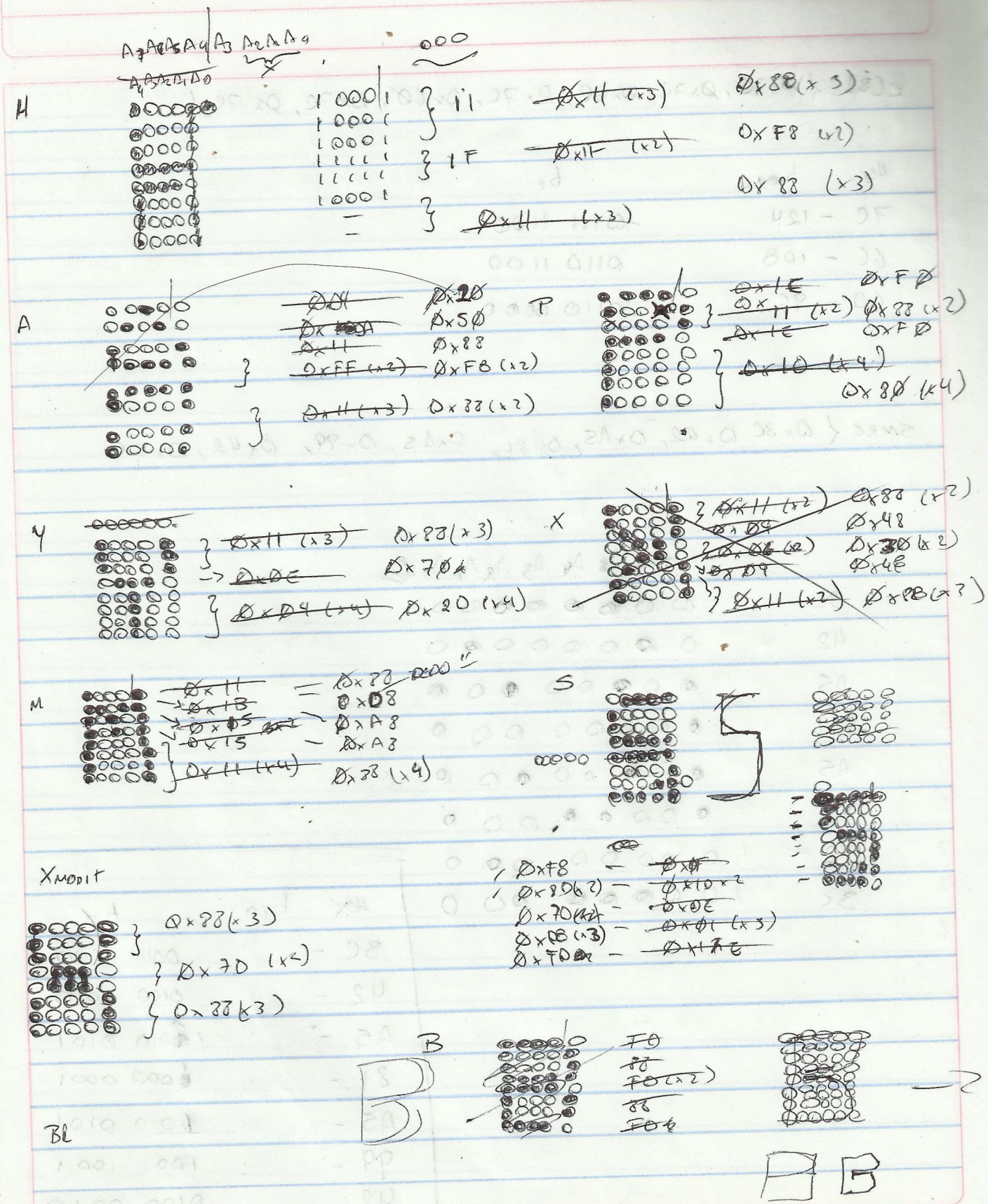
e[8] { 0x7C, 0x7C, 0x6C, 0x7C, 0x60, 0x7C, 0x7C }

Hex	b10	b_2
7C	124	0111 1100
6C	108	0110 1100
60	96	0110 0000

SMILE { 0x3C 0x42, 0xA5, 0x81, 0xA5, 0x99, 0x42, 0x3C

	A_7 A_6 A_5 A_4 A_3 A_2 A_1 A_0
3C	0 0 1 1 1 1 0 0
42	0 1 0 0 0 0 1 0
A5	1 0 1 0 0 1 0 1
81	1 0 0 0 0 0 0 1
A5	1 0 1 0 0 1 0 1
99	1 0 0 1 1 0 0 1
42	0 1 0 0 0 0 1 0
3C	0 0 1 1 1 1 0 0

Hex	b10	b_2
3C	60	0011 1100
42	66	0100 0010
A5	165	1010 0101
81	129	1000 0001
A5	165	1010 0101
99	153	1001 1001
42	66	0100 0010
3C	60	0011 1100



8421

B

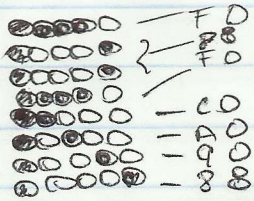
ØxFØ
Øx88 (x2)

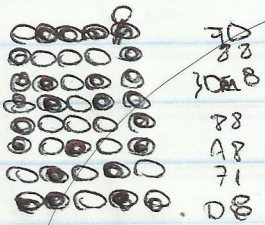
FØ(x2)

88 (x8)

FØ(x2)

R



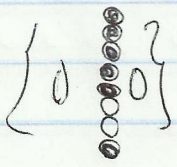


ØxF8
-Øx8Ø
ØxFØ
ØxF8

ØxBØ

ØxBØ	Øx08
ØxCØ	Øx18
ØxEØ	Øx38
ØxFØ	Øx78
ØxF8	ØxF8

Øx20



Øx20

Øx08

Øx50

Øx88 x3

Øx20