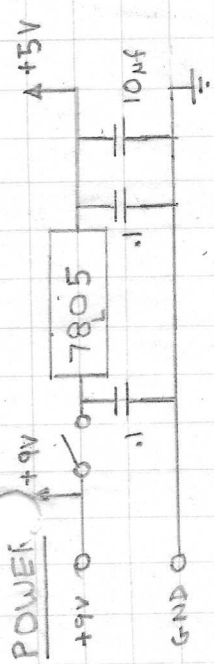
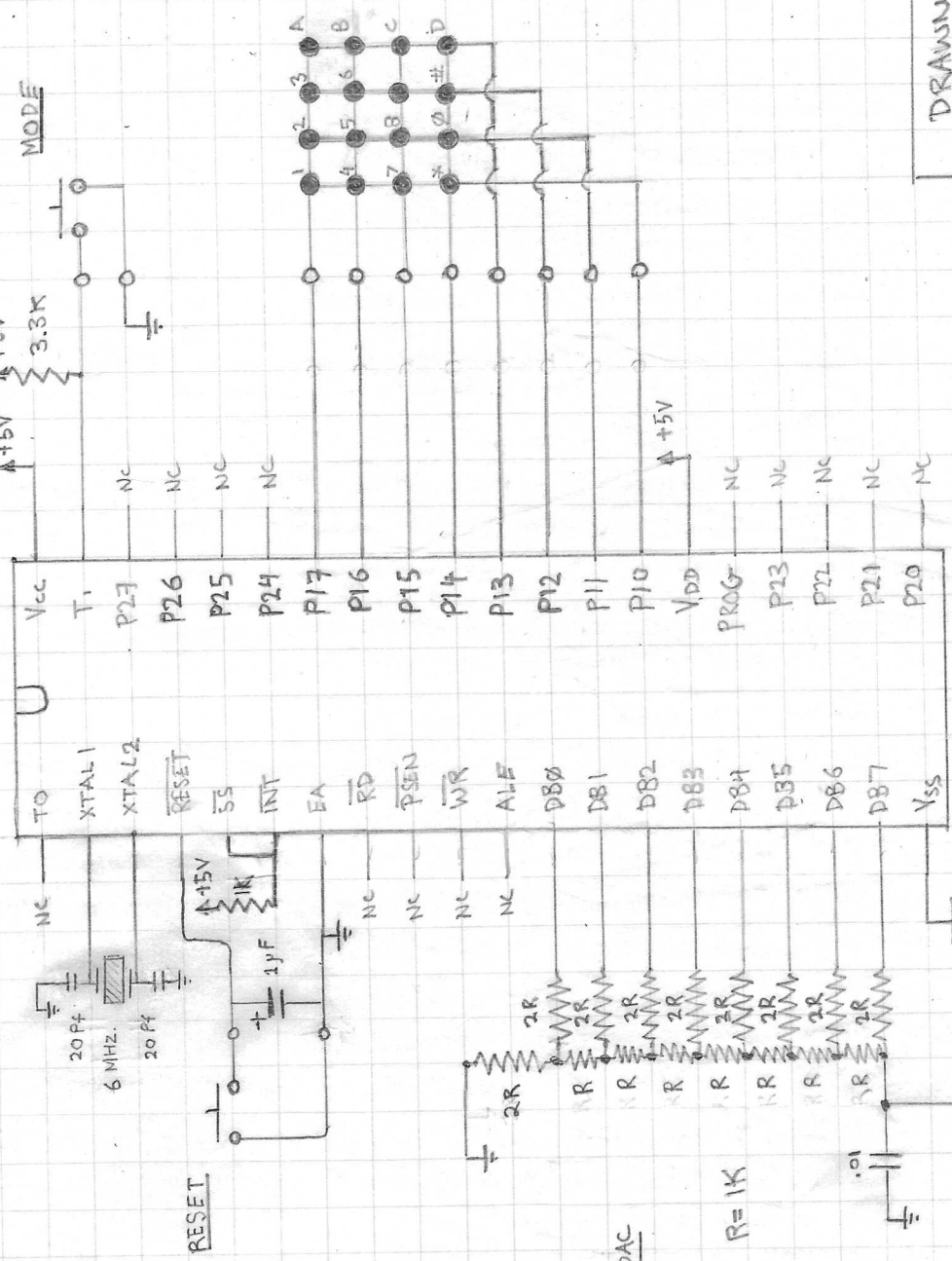


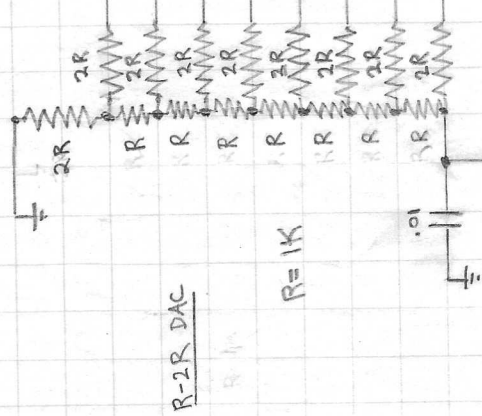
M I C R O - T O N E



8748



KEYPAD MATRIX



R=1K

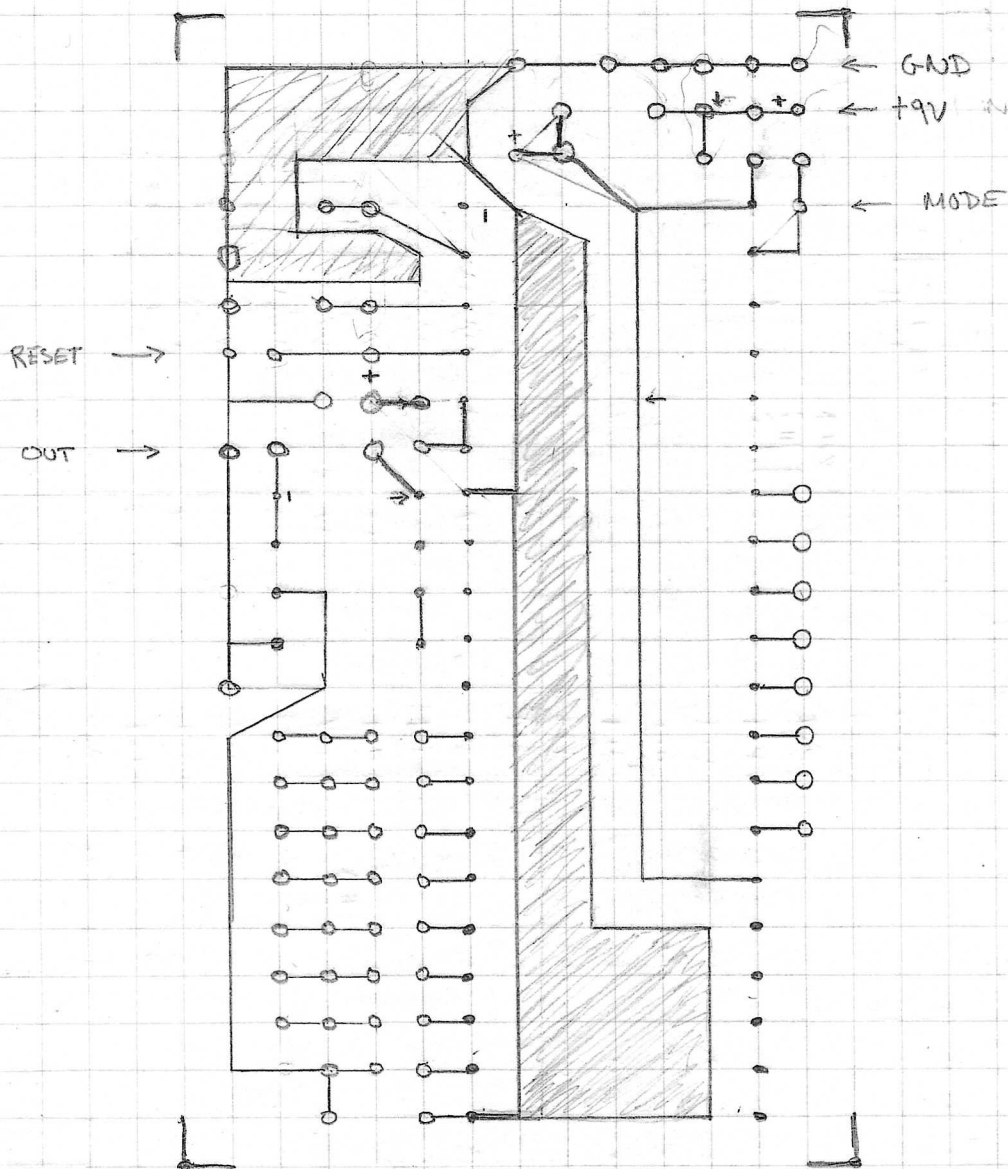
1/2 LM358

DRAWN 5-27-86
REV1 6-3-86
REV2 6-20-86

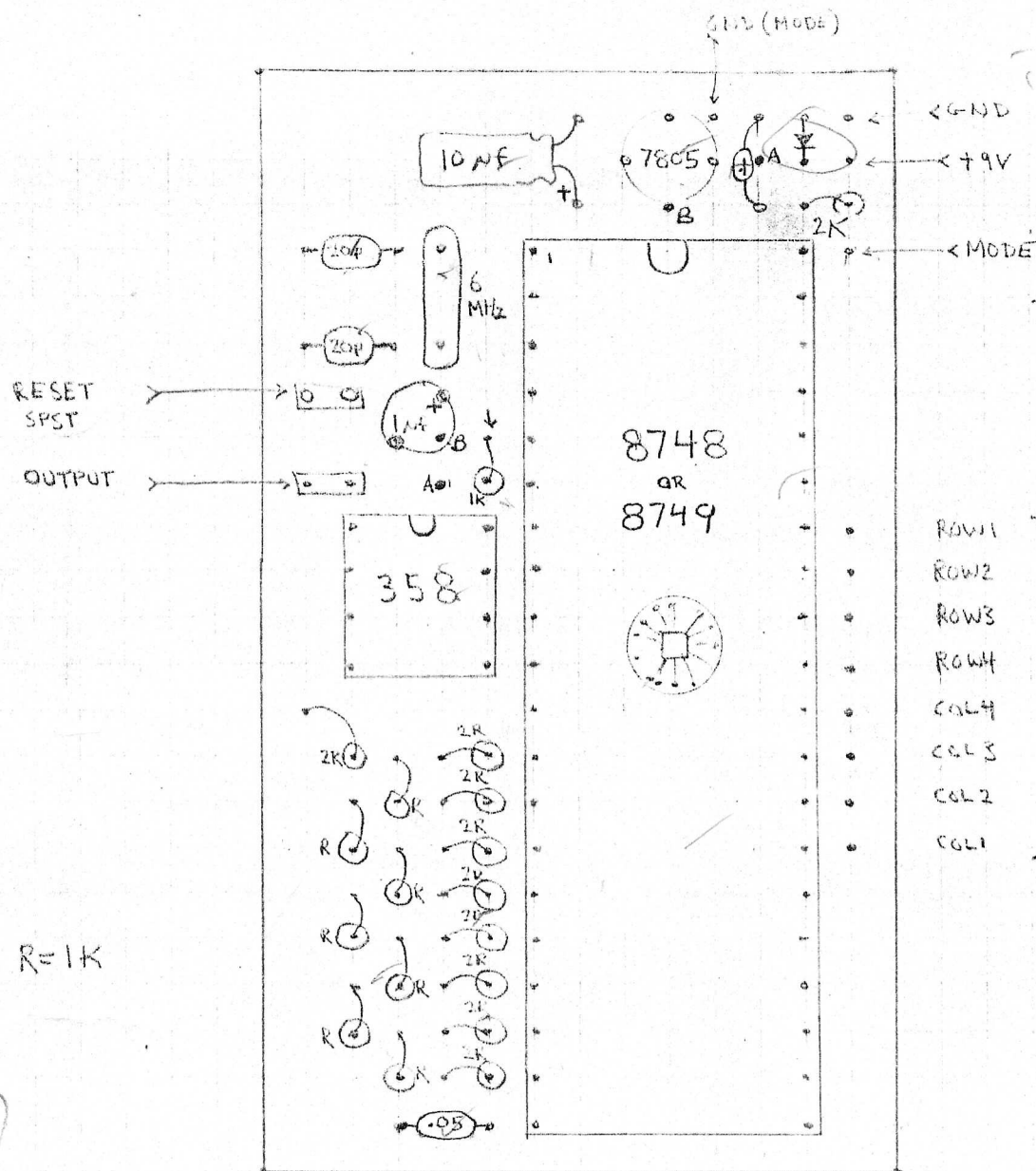
MICRO-TONE



P.C. BOARD LAYOUT.
X-RAY THROUGH COMPONENT SIDE



COMPONENT PLACEMENT



120	2k
120	1K
11	10nF
11	1nF
11	.047
11	.1
11	6 Mhz
11	1003
11	8 Pin
11	40 Pin
11	78L05
6	358

KEYPAD

gv clip

96

speakers

L K

100 55

SOFTWARE V 2.8

1	2	3	A
4	5	6	B
7	8	9	C
*	Ø	#	D

MODE Ø (DTMF)

WHITE + SILVER BOX

1	2	3	KP
4	5	6	KP2
7	8	9	ST
C11	Ø	C12	2600

MODE 1 (MF 2 OF 6 700-1700 (200) + 2600)

BLUE BOX

5	10	25	25
5	10	25	25
5	10	25	25
5	10	25	25

MODE 2 (COINS) (17¢ + 22¢ 33 or 66 ms pulses)

RED BOX

DIAL-TONE	-	-	-
BUSY	-	-	-
RING	-	-	-
IC	-	-	-

MODE 3 (MISC TELCO SOUNDS)

* MODE Ø	AUTO DIAL	-	-
* MODE 1	INSERT PAUSE	-	-
* MODE 2	CLEAR	-	-
* MODE 3		-	-

FUNCTION KEYS

↑ NEED PW TO USE

SOFTWARE DATA (PROGRAM) V 2.8

MAIN PROG. V 2.8

000 RESET

00E MAINLOOP

SUBROUTINES: V 2.8

200	WAIT	FOR DELAY	$T_L = 15 \text{ ns}$	} $D = 16 T_L F$
209	DUALTONE	TWO TONES	$T_L = 75 \text{ ns}$	
227	TONE	ONE TONE	$T_L = 425 \text{ ns}$	

239 SCANKEY SCANKEY PAD $F\phi = 1$ if No Key Pressed
 $F\phi = 0$ if Key Pressed

R5' AND ACC. CONTAIN THE KEY IN UPPER 4 BITS

KEY CODES:

$F\phi^1$	$E\phi^2$	$D\phi^3$	$C\phi^4$
$B\phi^5$	$A\phi^6$	$9\phi^7$	$8\phi^8$
$7\phi^9$	$6\phi^{10}$	$5\phi^{11}$	$4\phi^{12}$
$3\phi^{13}$	$2\phi^{14}$	$1\phi^{15}$	$0\phi^{16}$

259 WAITKEY WAITS FOR A KEYPRESS

R5' AND ACC. HOLD KEY CODE

25E CHECKPW GETS AND CHECKS A 6 DIGIT PW

27A BEEP BEEPS ONCE $\sim 3000 \text{ Hz}$

28D EXEC DIALS OUT WHATS IN DIAL BUFFER

SOFTWARE DATA

(SCRATCH PAD MEM.)
64 BYTES

RB0

R0	FRAC 1
R1	INT 1
R2	WADD 1L
R3	WADD 1H
R4	SCRATCH
R5	COUNT 0
R6	COUNT 1
R7	COUNT 2

RB1

0'	FRAC 2
1'	INT 2
2'	WADD 2L
3'	WADD 2H
4'	SCRATCH
5'	FLAGS
6'	KEY
7'	BUFPTR

DIGIT BUFFER

20 - 3FH

FORMAT:

1	M	DIGIT	0	0
---	---	-------	---	---

00H = PAUSE

R5'	S	0	0	0	0	0	MODE
-----	---	---	---	---	---	---	------

S=0: Full Access

S=1: Restricted

STACK 8-17H

SUTREKH

788354

PASSWORD

001
011
111
111
0100

70 60 60 70 A0 B0

44

39

52

40

155

20 →

90

@ 310 H

1F0 H

JUMP TABLE @ ~~310~~

	Key	MODE 4 FUNCTION (JUMP)
BF0	D	IE
BF1	#	IE
BF2	0	IE
BF3	*	44
BF4	C	IE
BF5	9	IE
BF6	8	IE
BF7	7	0706
BF8	B	IE
BF9	6	IE
BFA	5	IE
BFB	4	300
BFC	A	IE
BFD	3	IE
BFE	2	IE
BF	1	20 ALTONE
IF		