

DIALER TELEPHONE CIRCUIT

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Marlon Rose-Mighty
Computer/Electronic Engineering Technology
Mohawk College of Applied Arts and Technology
132 Stinson St.
Hamilton, Ontario

*DELAY ROUTINE
DLY20

L20

STX	DLYX
LDX	#3
DECX	
BNE	L20
LDX	DLYX
RTS	

*save X in RAM
*3*7-1us/-21us
*delay loop approx. 21us
*3-2,2-1,1-0
*recover saved X value

*7segment display subroutine
*INPUT X=N A=keycode
*OUTPUT X=n A=keycode

DISPNUM

STA	DISPA
STX	DISPX
TAX	
LDA	DISPTBL,X

* A-->DISPA (stack emulate)
* X-->DISPX
*Acc ---> X index reg
*use keycode as offset into the table
to
*load the correct value for LED code
*turn on LED's
*restore values DISPA-->A
*restore values DISPX-->X

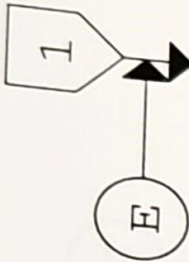
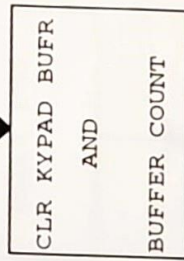
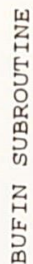
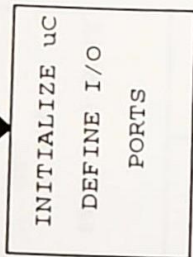
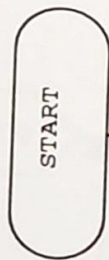
STA	PORTB
LDA	DISPA
LDX	DISPX
RTS	

*NOTE: converting KEYCODE-->DSPLY CODE
*this table is in order of keycode

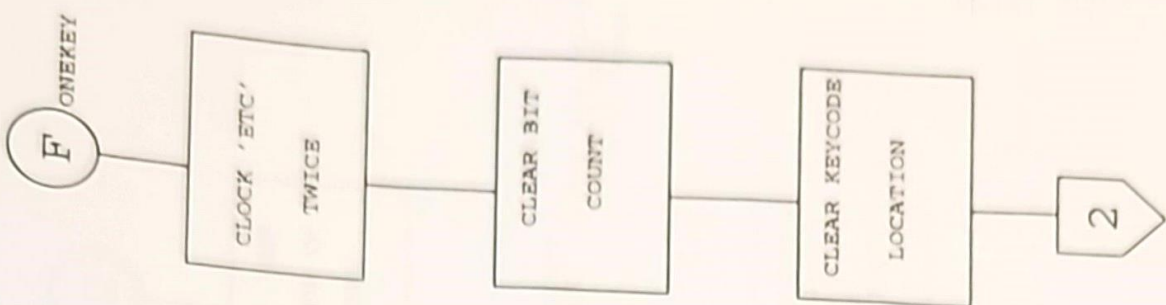
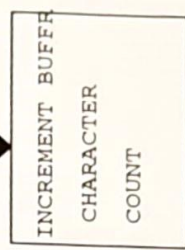
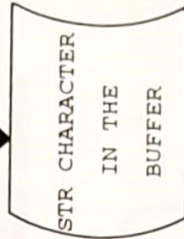
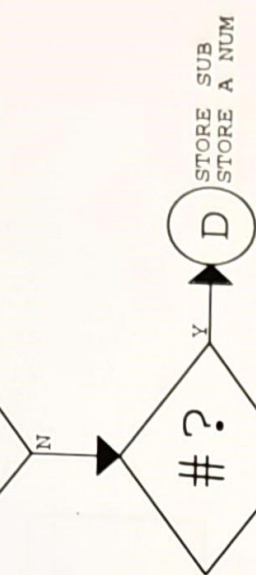
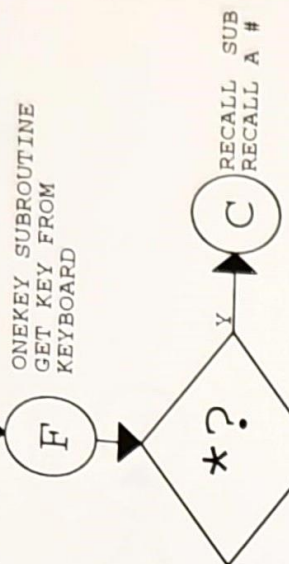
DISPTBL

FCB	\$FF,\$FF,\$FF,\$FF,\$A0
FCB	\$92,\$80,\$C4,\$D6,\$82
FCB	\$98,\$D0,\$C3,\$99,\$F8
FCB	\$F9

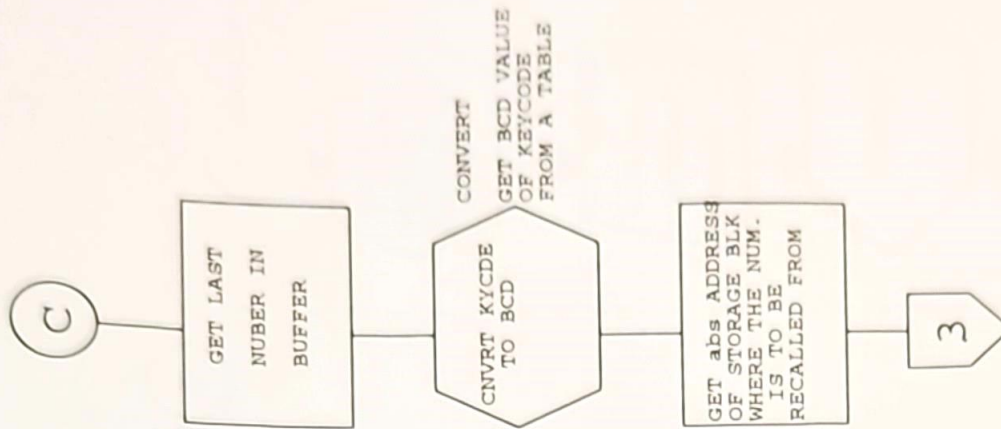
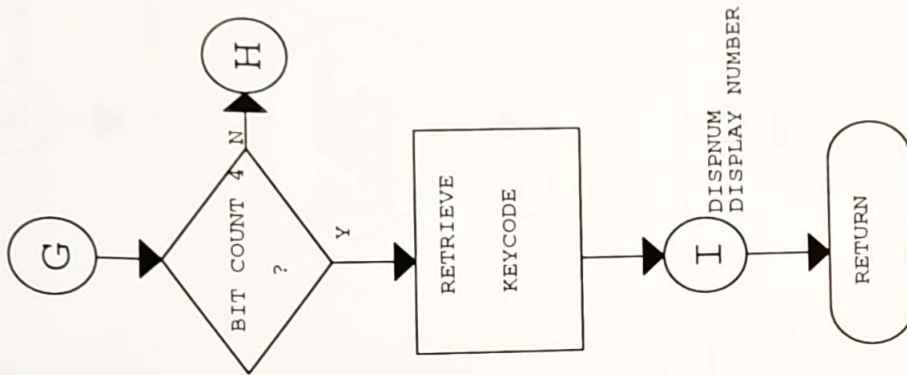
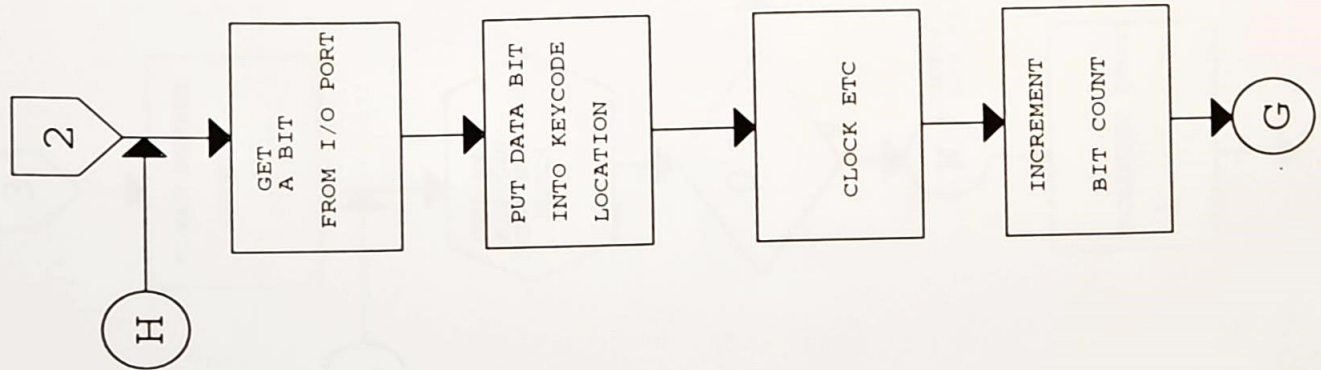
ORG	\$1FFE	***Reset vector*****
FCB	\$01	
FCB	\$00	***start of code*****



ONEKEY SUBROUTINE
GET KEY FROM
KEYBOARD



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Title	
TECHNICAL REPORT FLOWCHART	
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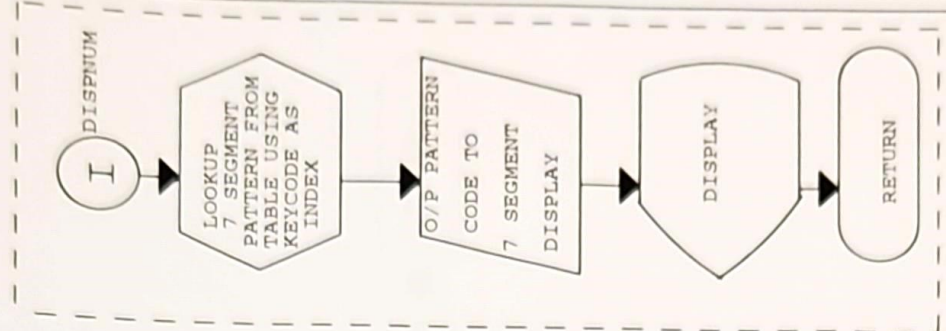
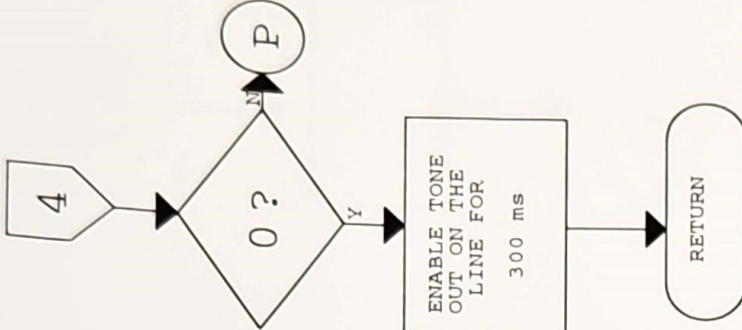
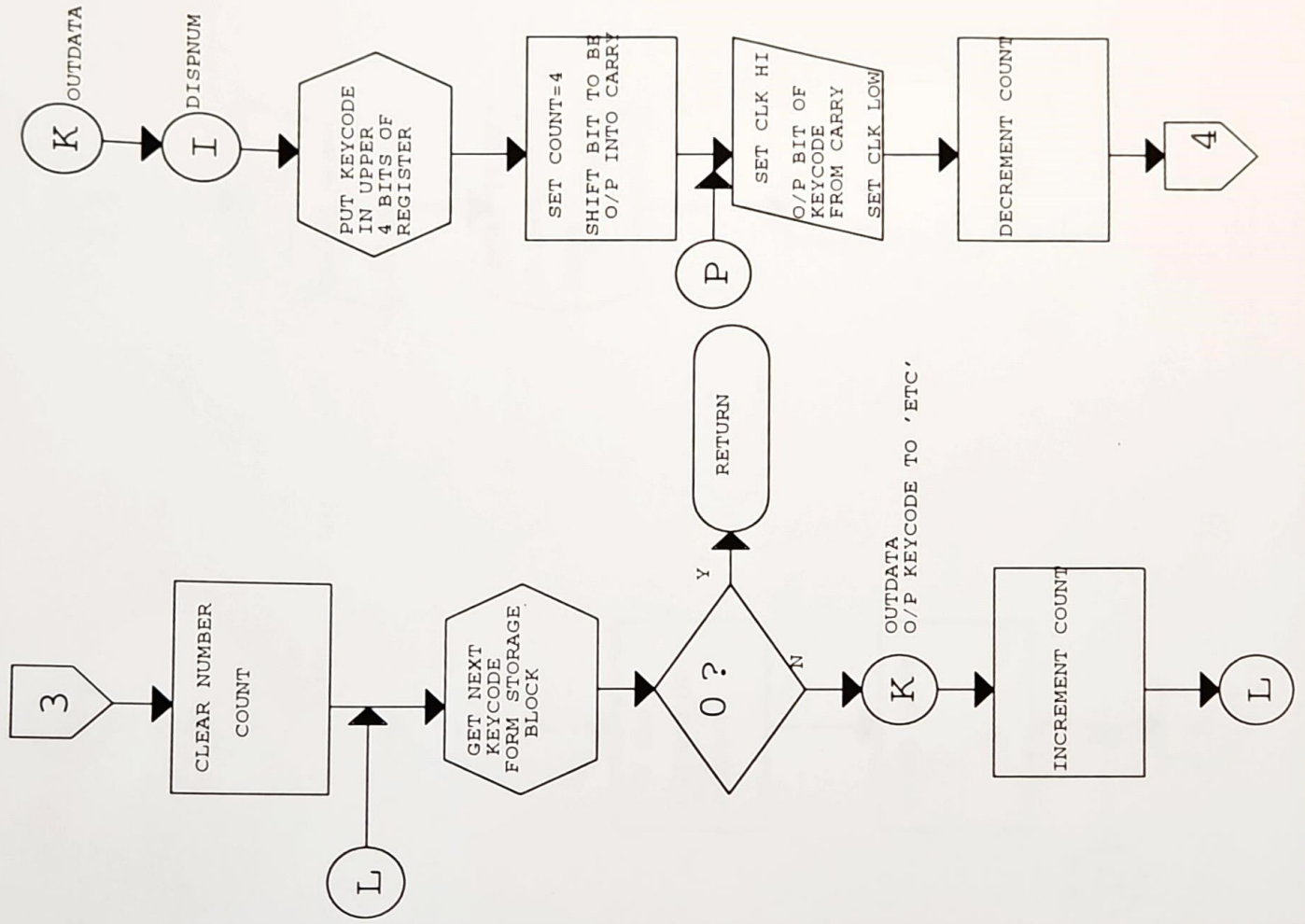
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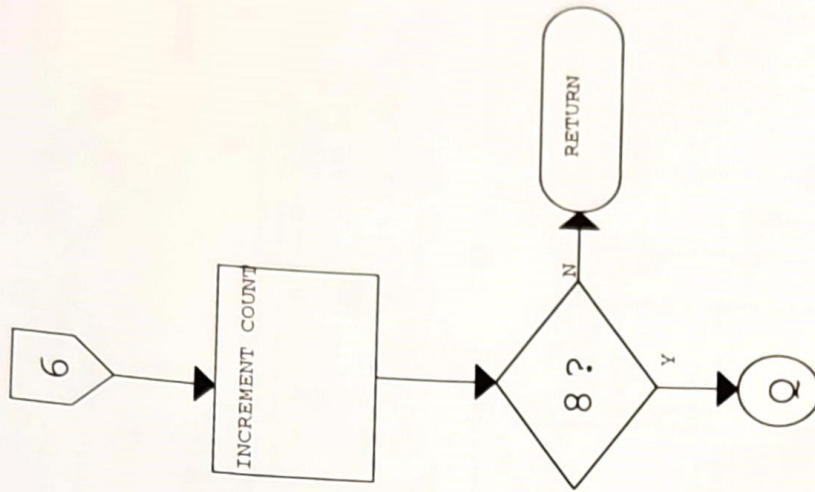
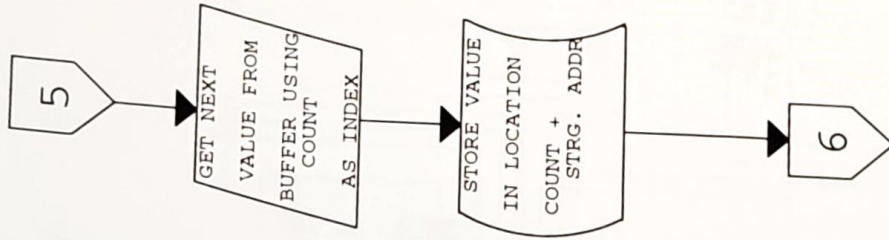
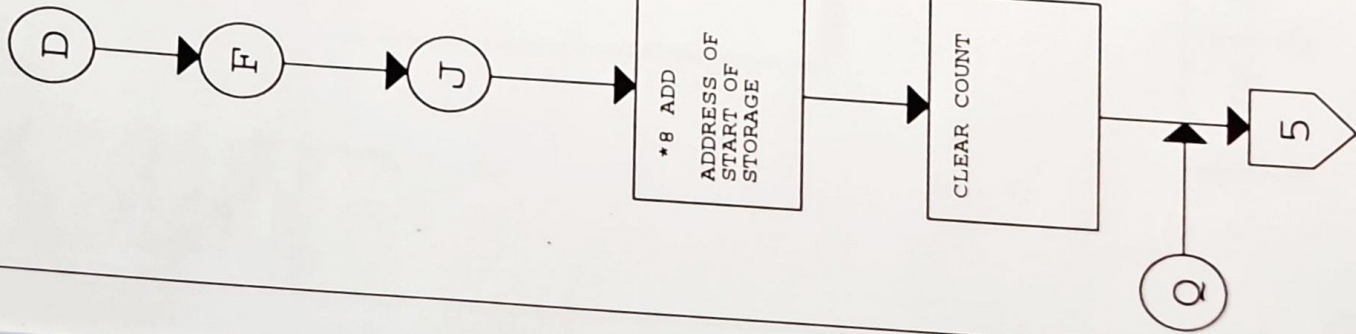
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REV
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Title

Technical Report Flowchart

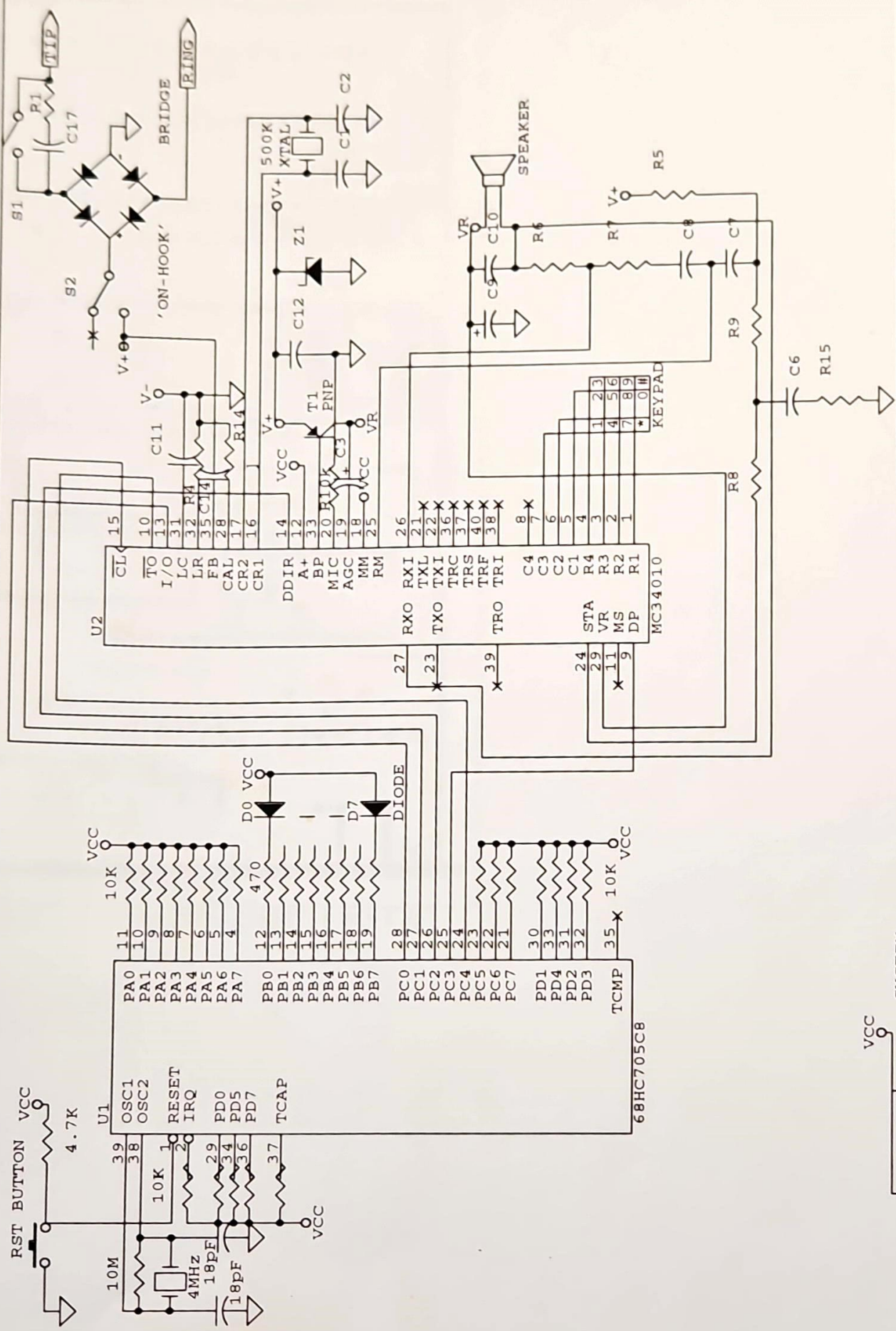
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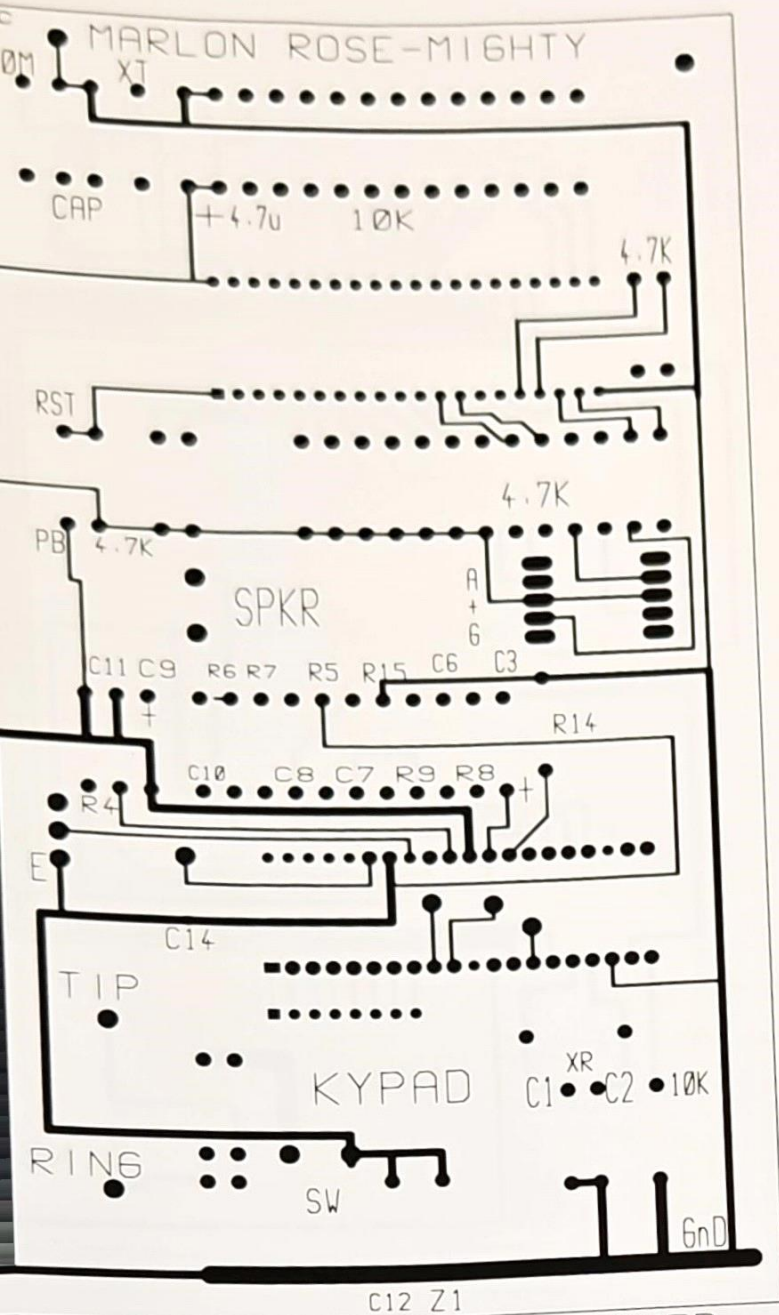
REV

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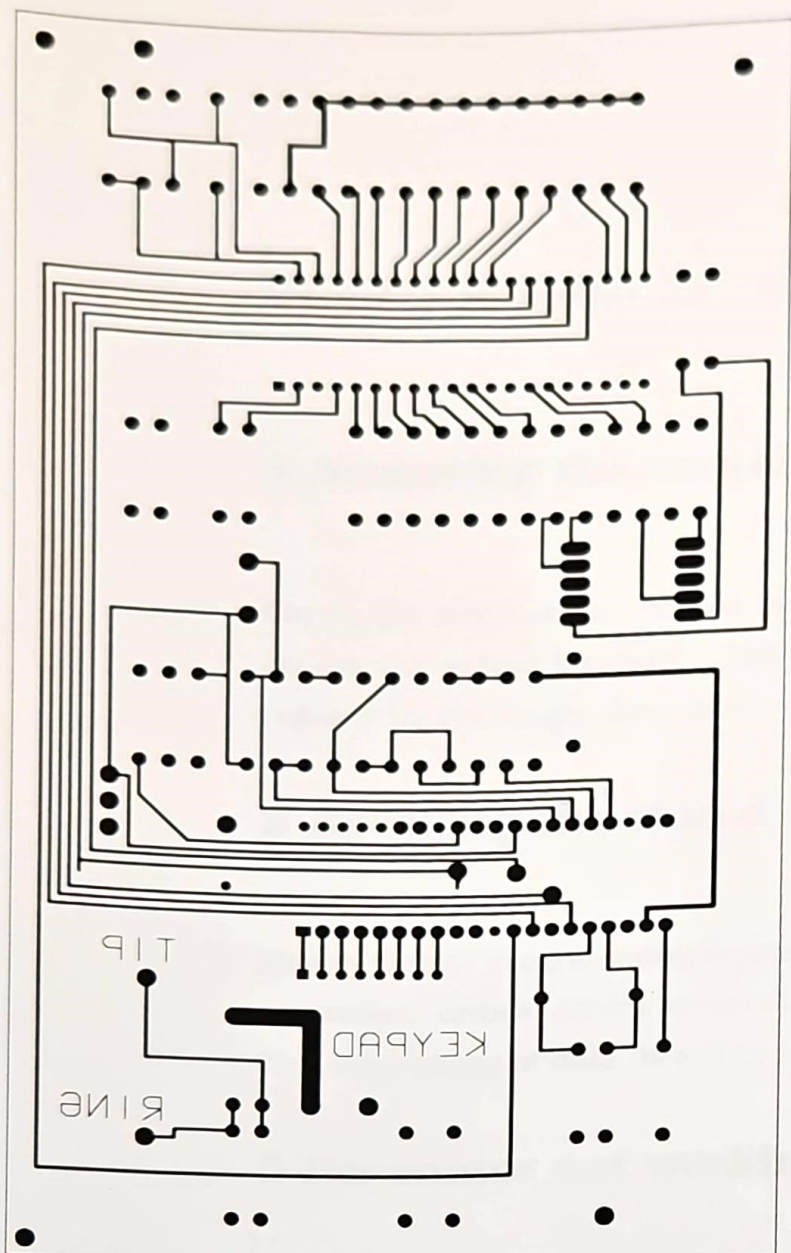


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Technical Report Schematic		
Size	Document Number	REV
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DIALER - COMPONENT LAYER

Appendix B



DIALER - SOLDER LAYER

Appendix B

APPENDIX D

Parts List Technical Report

Capacitors	Resistors
2 x 100pF [C1, C2]	36 ohm [R14]
1.0uF @ 3.0v [C3]	2.0k [R15]
0.1uF [C12]	82 ohm @ 1.0W [R4]
2 x 0.047uF [C7, C8]	150K, 56K [R5 ,R7]
2.2 uF @ 3.0V [C9]	200K [R6]
2 x 0.01uF [C10, C12]	1.5K,30K [R8,R9]

Critical Devices

MICRO-CONTROLLER 68HC705 C8
MC34010P
4 x 1N4005/1N4006/1N4007 [BRIDGE]
2N4126 or EQUIVALENT [T1]
1N5133A/1N5931A, 18V @ 1.5W [Z1]
Ceramic resonator 500Khz +/- 0.2Khz [500 khZ XTAL]
MOMENTARY PUSH BUTTON [RESET]
ON/OFF SWITCH [SW]
Phone speaker PRIMO MODEL DH-34 (300 ohm)