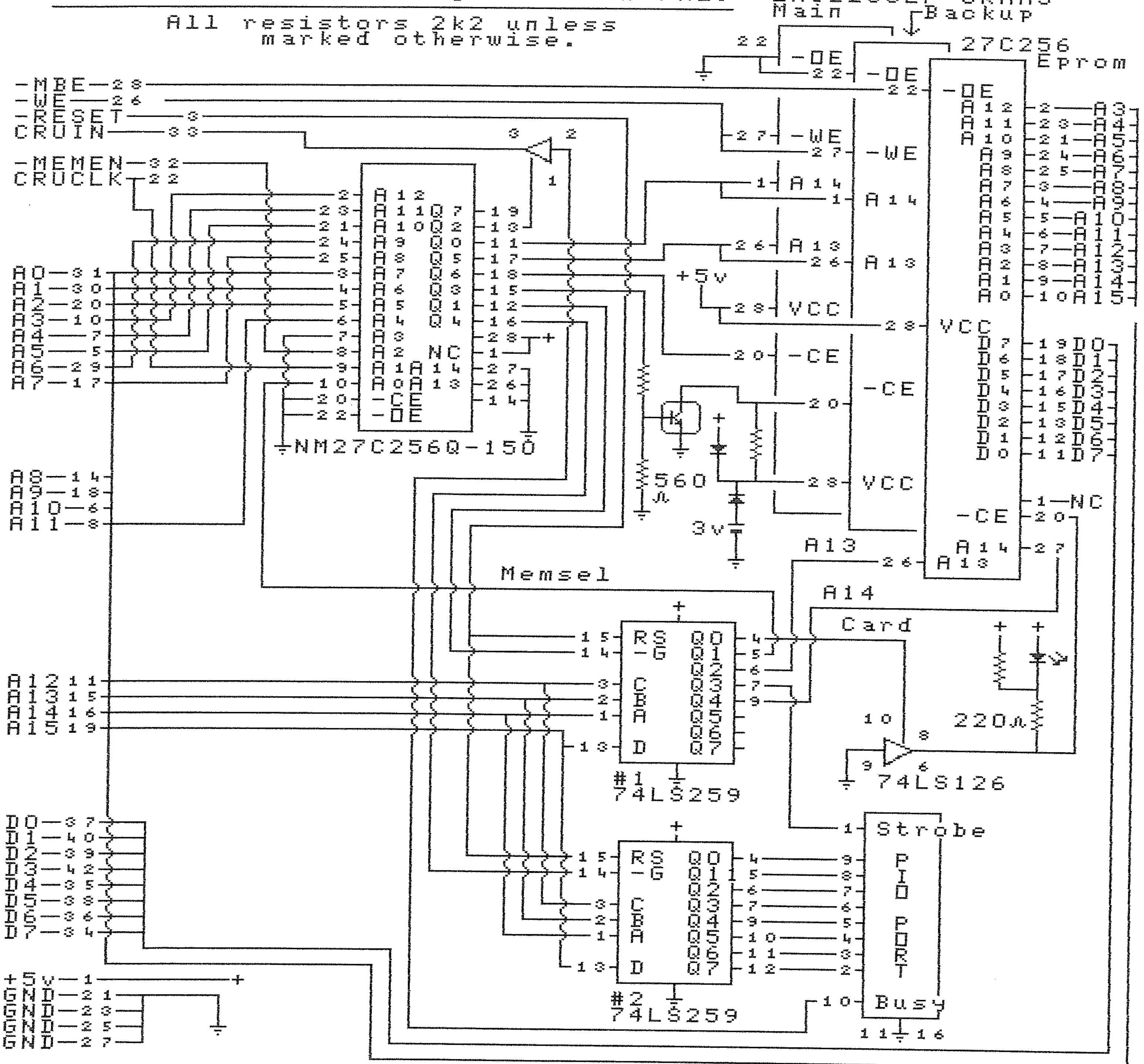
CADET Console Expansion Version 259PAL (C/CCT)

Proposed circuit using EPROM as PAL.

All resistors 2k2 unless marked otherwise.



INPUTS

EPROM=
NM27C256Q-150

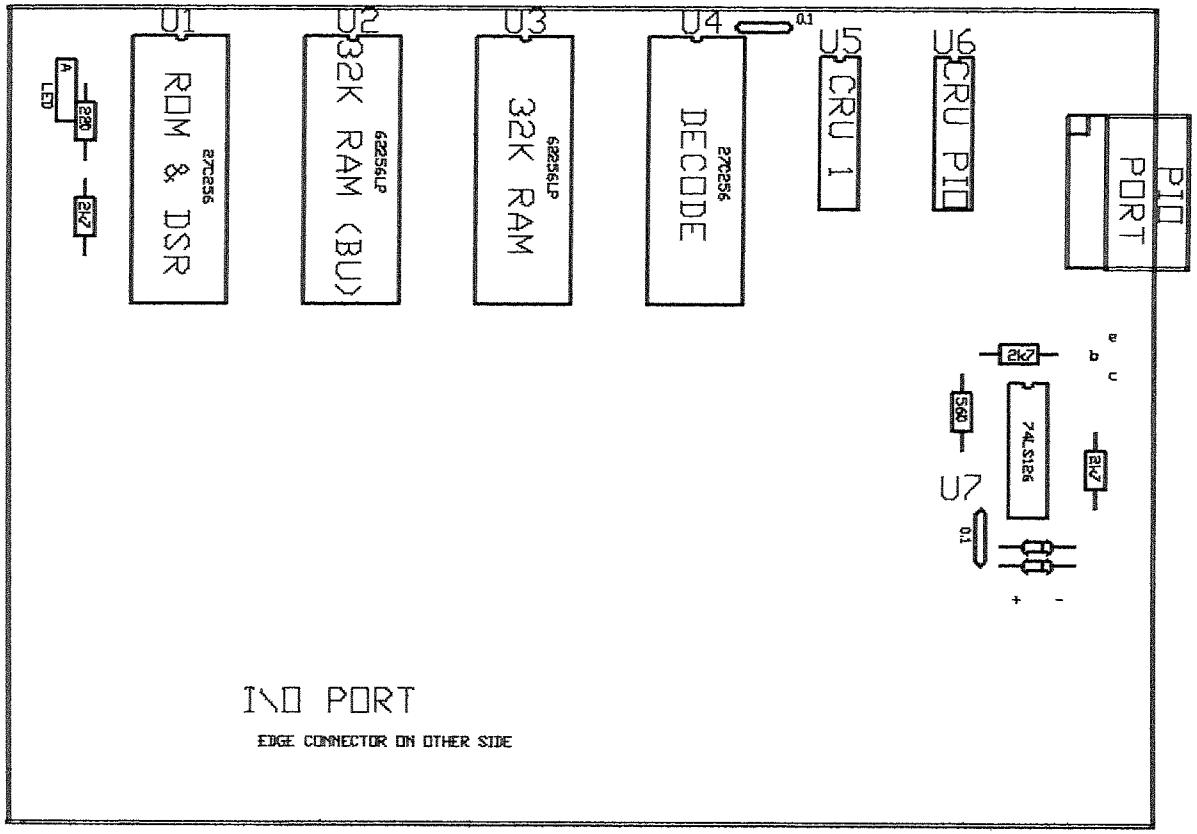
Function	A3	4567	012B	GND	-MEMEN	CRUCLK	MEMSEL
>2000 MExP	X	XXXX	001X	0	0	1	0
>2000 B/UP	X	XXXX	001X	0	0	1	1
>A000 MExP	X	XXXX	101X	0	0	1	0
>A000 B/UP	X	XXXX	101X	0	0	1	1
>C000 MExP	X	XXXX	110X	0	0	1	0
>C000 B/UP	X	XXXX	110X	0	0	1	1
>E000 MExP	X	XXXX	111X	0	0	1	0
>E000 B/UP	X	XXXX	111X	0	0	1	1
>1000 259#1	1	0000	0000	0	X	0	X
>100X CRUIN	1	0000	0000	0	X	1	X
>1010 259#2	1	0000	0001	0	X	0	X

OUTPUTS

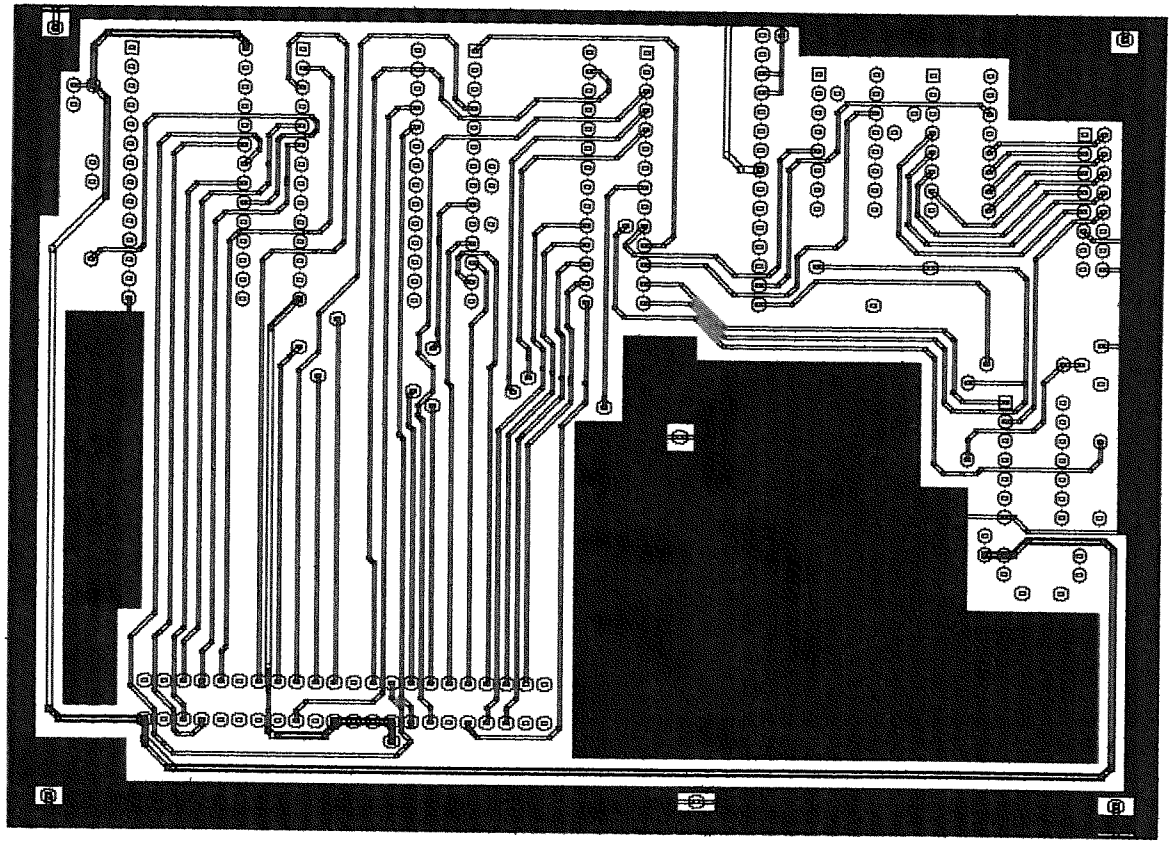
No Conn	-CE MEx	A13 Rams	-G #2 Latch	-CE B/U Ram	CRUIN Control	-G #1 Latch	A14 Rams		Hex
0	0	0	1	0	0	1	0	=	>12
0	1	0	1	1	0	1	0	=	>5A
0	0	1	1	0	0	1	0	=	>32
0	1	1	1	1	0	1	0	=	>7A
0	0	0	1	0	0	1	1	=	>13
0	1	0	1	1	0	1	1	=	>5B
0	0	1	1	0	0	1	1	=	>33
0	1	1	1	1	0	1	1	=	>7B
0	1	0	1	0	0	0	0	=	>50
0	1	0	1	0	1	1	0	=	>56
0	1	0	0	0	0	1	0	=	>42

0=Lo
1=Hi
X=Don't care

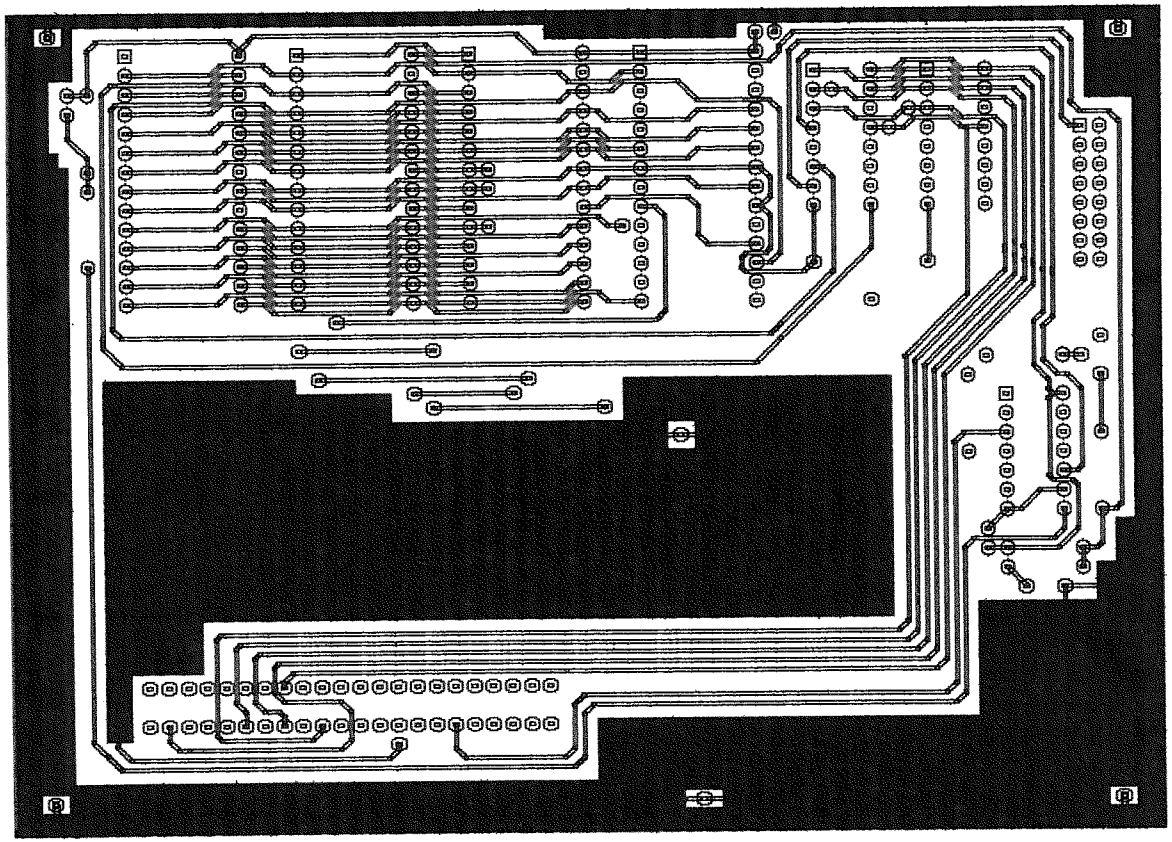
At non-valid addresses, inactive output state = 01010010 = >52



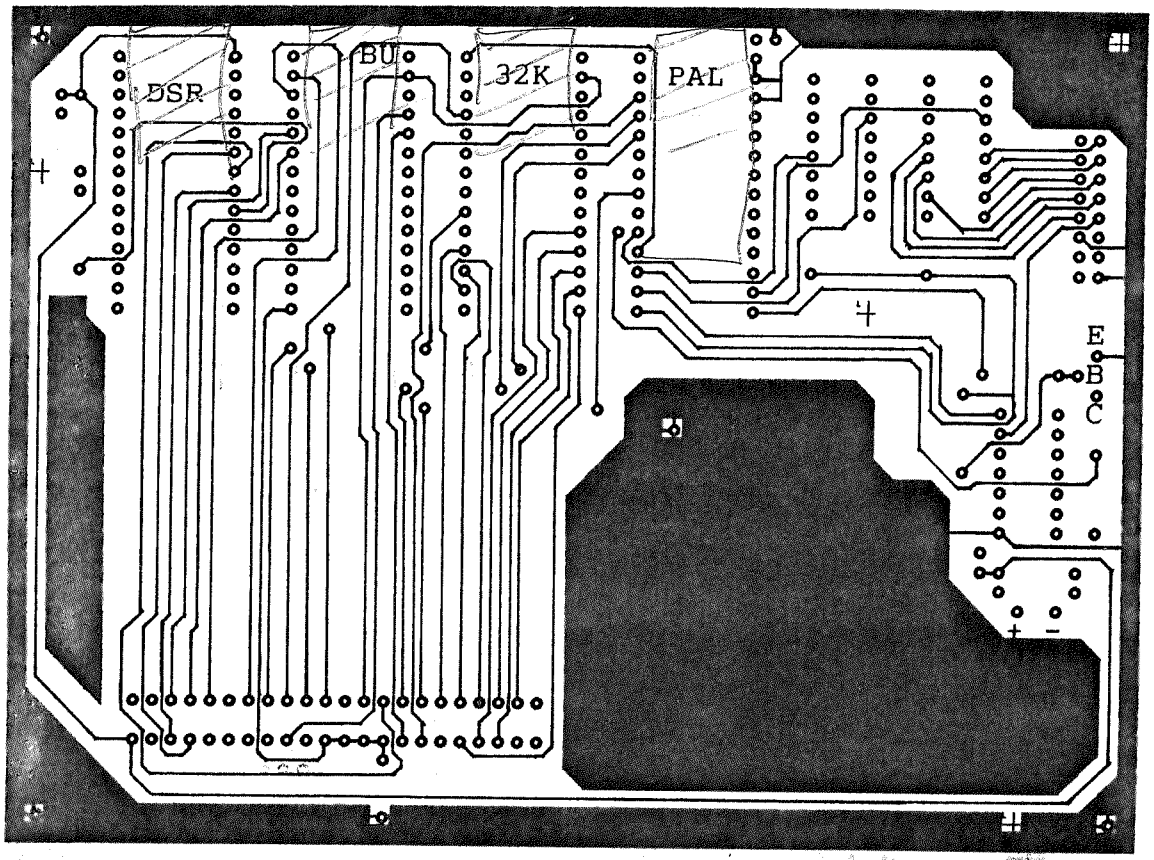
CADET Overlay



CADET Top Layer

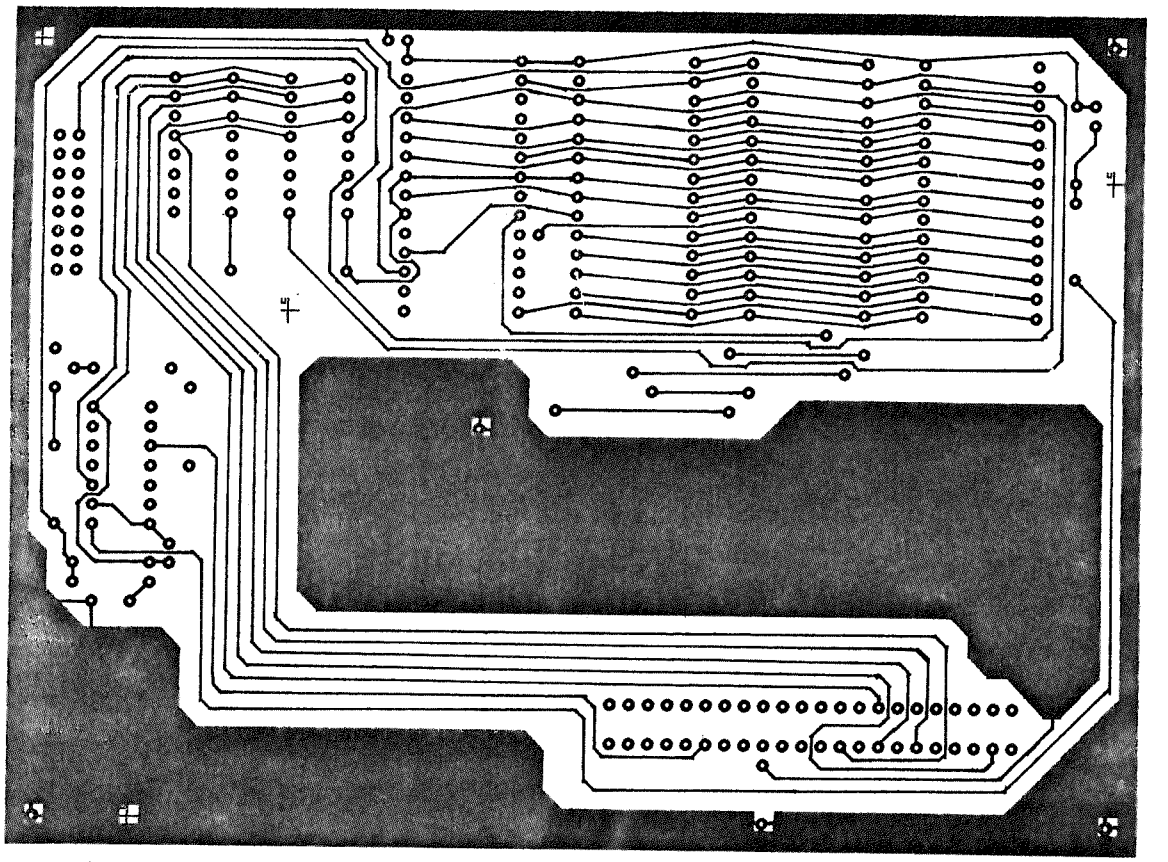


CADET Bottom Layer



ALL COMPONENTS THIS SIDE

(EXCEPT EDGE CONNECTOR)



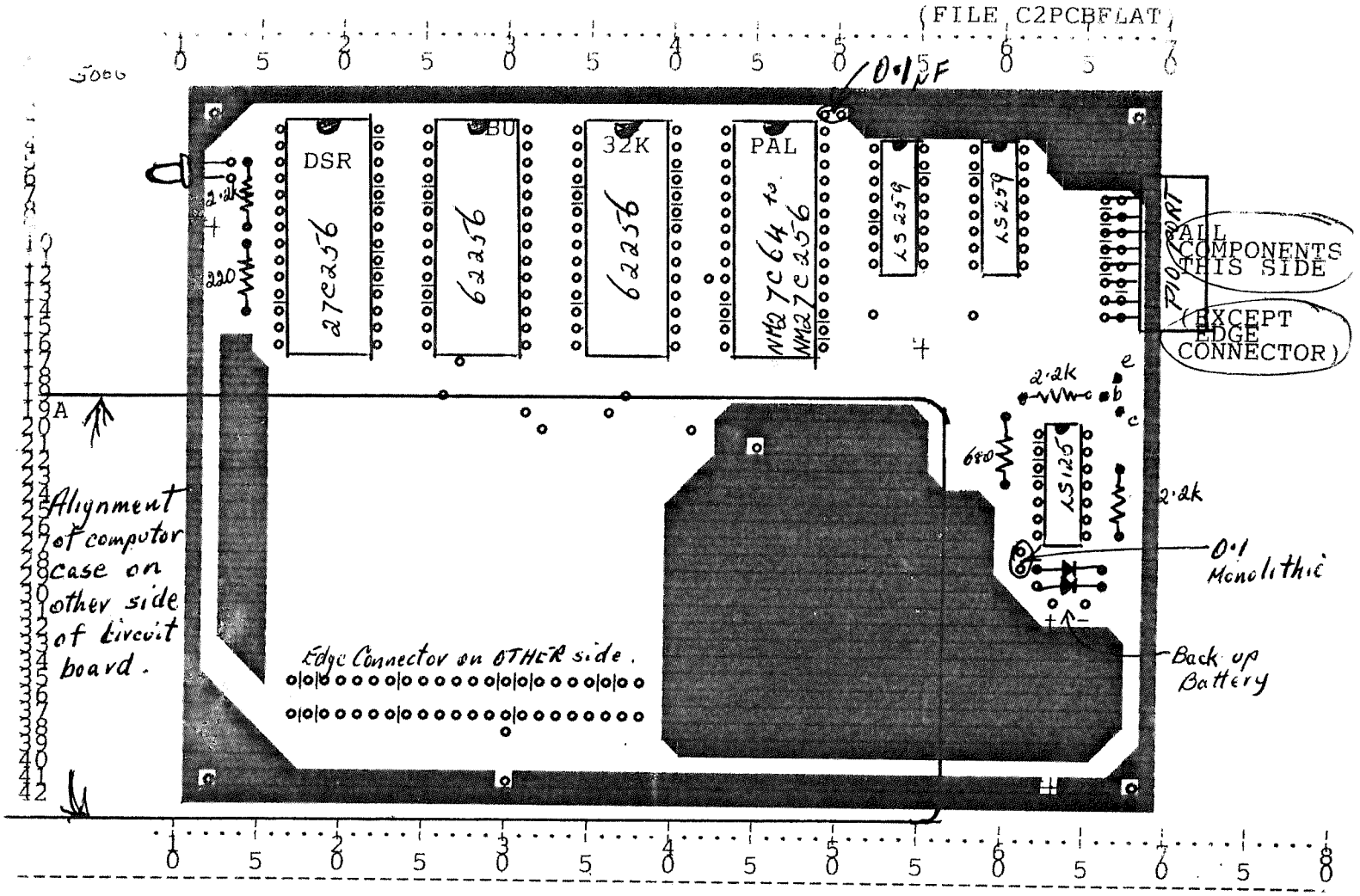
TAILOR "PAL" pins 26, 27, according to EPROM type.

27C256 both to ground -
27C128 Pin 26 gnd, Pin 27 to +
27C64 Pin 26 NC Pin 27 to +

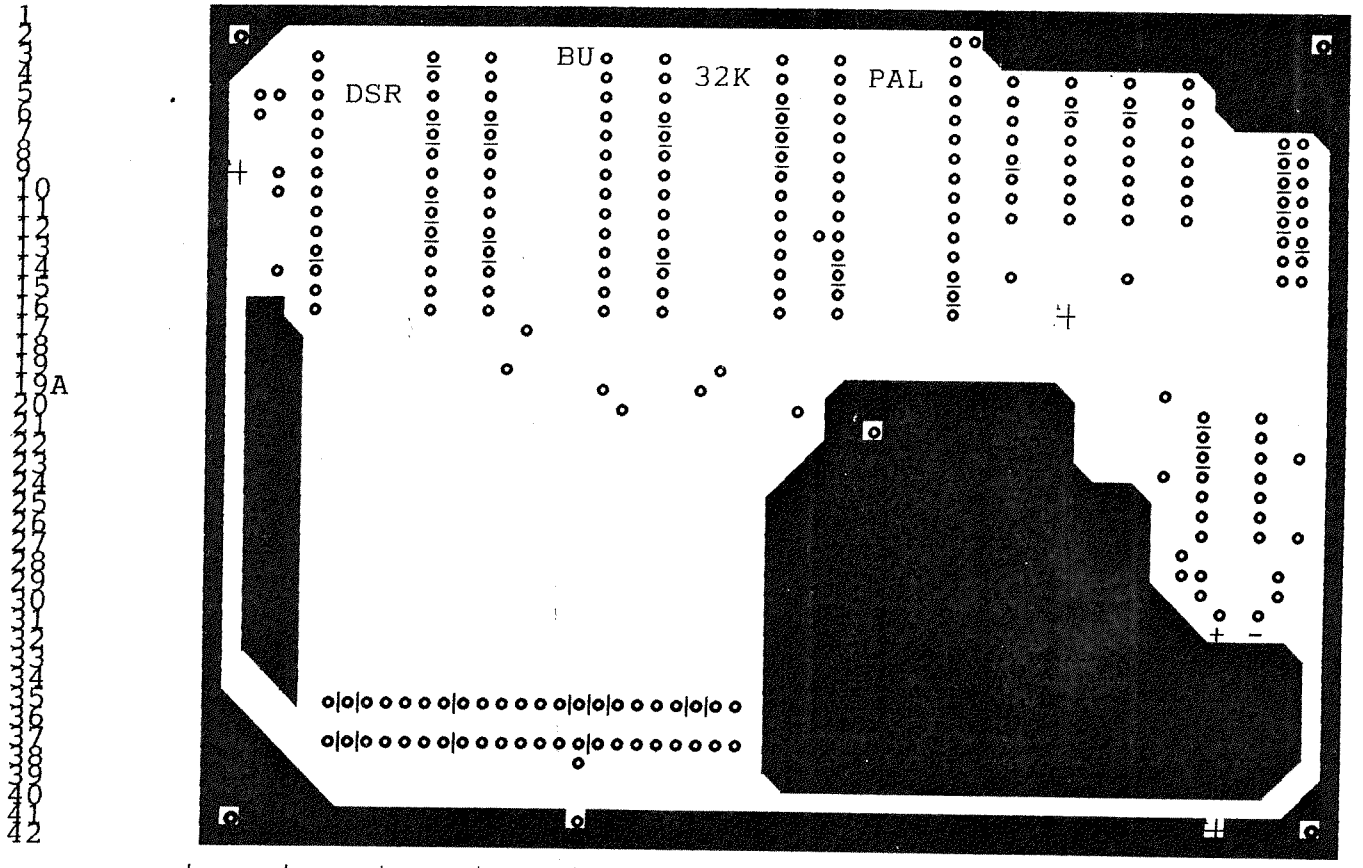
NOTE: PCB shows PIN 27 to both GND and to +

4 Jumper Wires

74LS259 Pin 1 to RAMs pin 9
" Pin 2 to " pin 6
" pin 3 to " pin 7
" pin 13 to " pin 10


(FILE C2PCBFLAT)
0.1μF
DSR
27c256
BU
62256
32K
62256
PAL
NM27C64 to
NM27C256
LS259
LS259
PLUG
ALL COMPONENTS THIS SIDE
(EXCEPT EDGE CONNECTOR)
2.2k
220
2.2k
680
LS125
2.2k
0.1 Monolithic
Back up Battery
Edge Connector on OTHER side.
A
Alignment of computor case on other side of circuit board.

(FILE C2PCBFLAT)



ALL COMPONENTS THIS SIDE

(EXCEPT EDGE CONNECTOR)