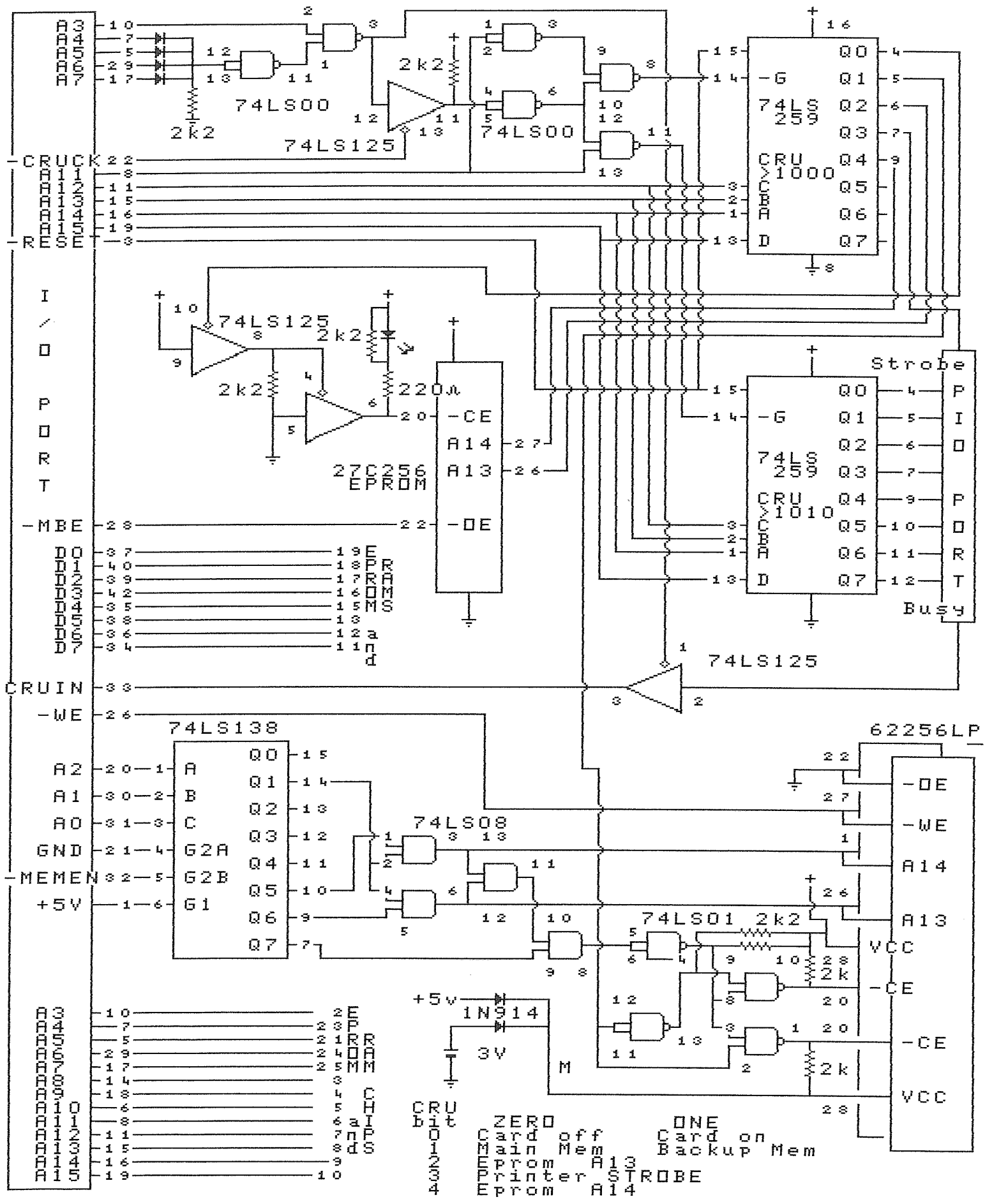


C A D E T Console Expansion

ORIGINAL
COMMERCIAL
DESIGN



FILE STORAGE ON 27C256 EPROM AND DISK

EPROM Disk
A14 A13 sector

Filename = "CADETDSR"

0 0 22

DSR CALLS CHARA 1 EDITA 2

0 1 42

EDITA 1

1 0 62

FORMA 1

1 1 82

FORMA 2

EDITA 2

F A U L T F I N D I N G

Install CADET and switch computer power ON.

Stage	Fault condition and possible cause.
Title screen	Blank screen. Shorts in address and data lines etc. I do this test on a new board after the edge connector and I/O extension are installed.
Menu screen	No menu. DSR eprom problem. Is LED ON? CRU line problem
Option 1, Editor	Editor program does not run. Memory expansion chip or EPROM bank switching on pins 26 and 27.)
Editor SF to RAM1 and RAM2 LF from each	Unsuccessful if Backup RAM fault.
Editor PF	Printer hangs and LED ON. Check STROBE (out) and BUSY (in) and CRUIN. (See "Printer access" below)
Format to PIO.LF	
Other checks:	Editor SaveCass and LoadCass, and Option 3 (Game loader)

SUPERBUG EXPLORATION

CRU bits used by the CADET at CRU Base C1000.

	Bit 7	Bit 6	Bit 5	Bit 4	Bit 3	Bit 2	Bit 1	Bit 0
CRU displacement				>10	8	4	2	1
Effect	None	none	none	Eprom A14	Printer STROBE	Eprom A13	Memory Select	Eprom enable and LED.

M2000, MA000, MC000 and ME000 - 4 memory expansion blocks - reads and writes.

C1000,0 2 to access above addresses in backup memory.
0 to access normal memory expansion area.

DSR EPROM bank switching

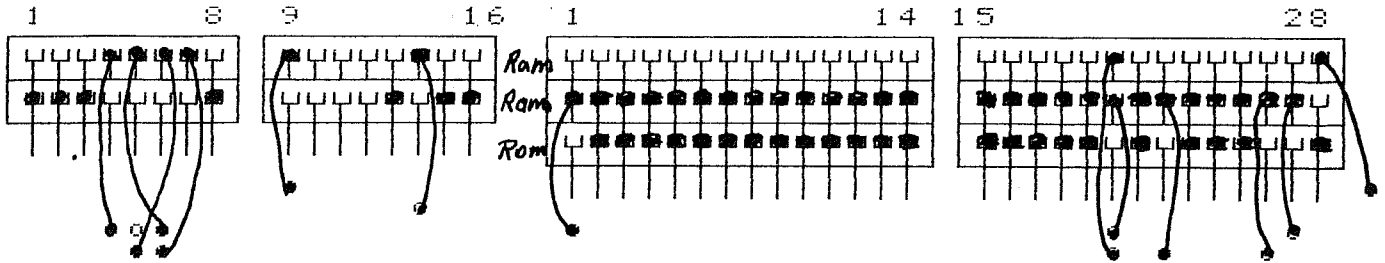
C1000,0 1 = Card turned on. DSR header at M4000 as AA00 0000 4010 etc.
C1000,0 5 = Edital program at M4000. Starts with 0420 3674
C1000,0 >11 = Formal program at M4000. Starts with 0460 B704
C1000,0 >15 = Forma2 program at M4000. Starts with A067 160C

Printer access

C1000,0 8 = STROBE set to Hi. (This is set Hi at power-up of the CADET)
C1000,0 0 = STROBE set to Lo.
C1007,1 (ENTER> reads the BUSY condition to the screen on spacebar presses.
(This tests the operation of the CRUIN line too).

74LS259

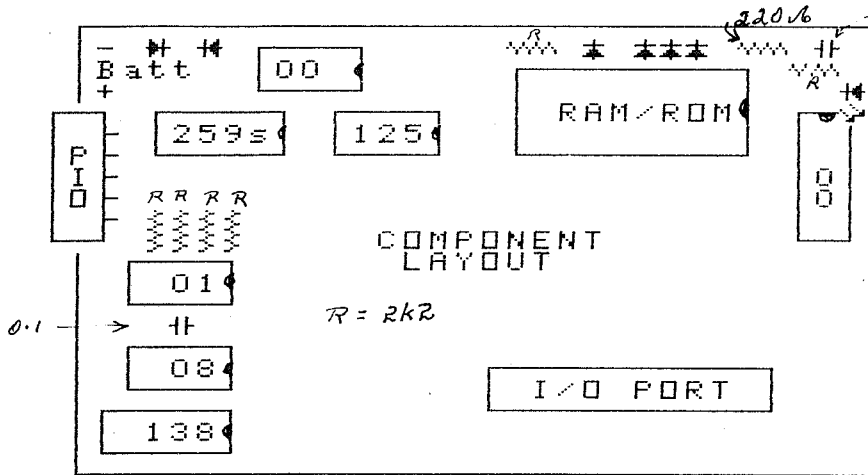
R A M and R O M



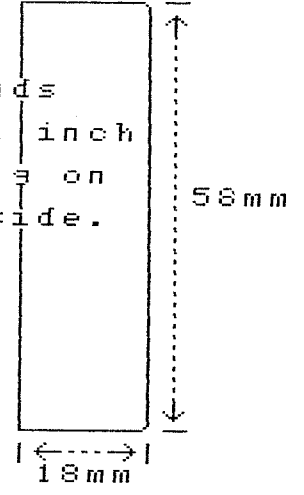
CIRCUIT BOARD Mods.

1. IC1 Pins 12 and 13 to be connected together.
2. PIO port: Pins 11 & 16 both to GND.

I/O Extension

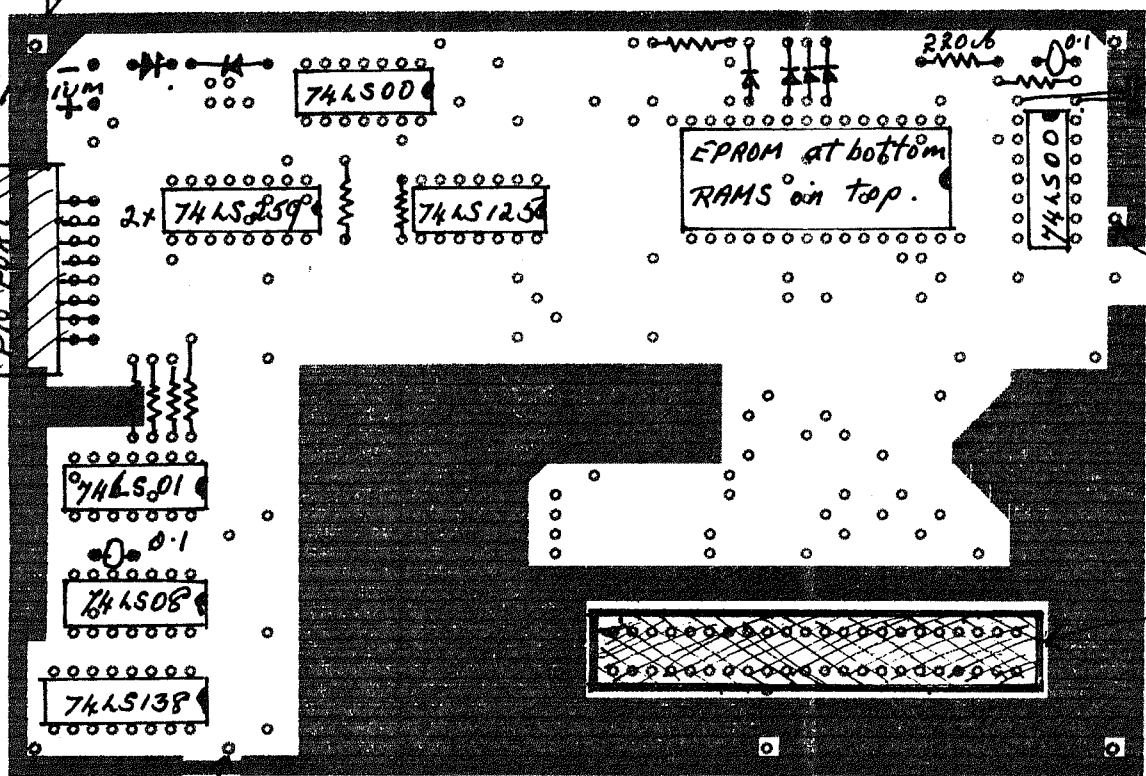


22 lands
of 0.1 inch
spacing on
each side.



Mounting hole

5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 7 0 5 0 8 0



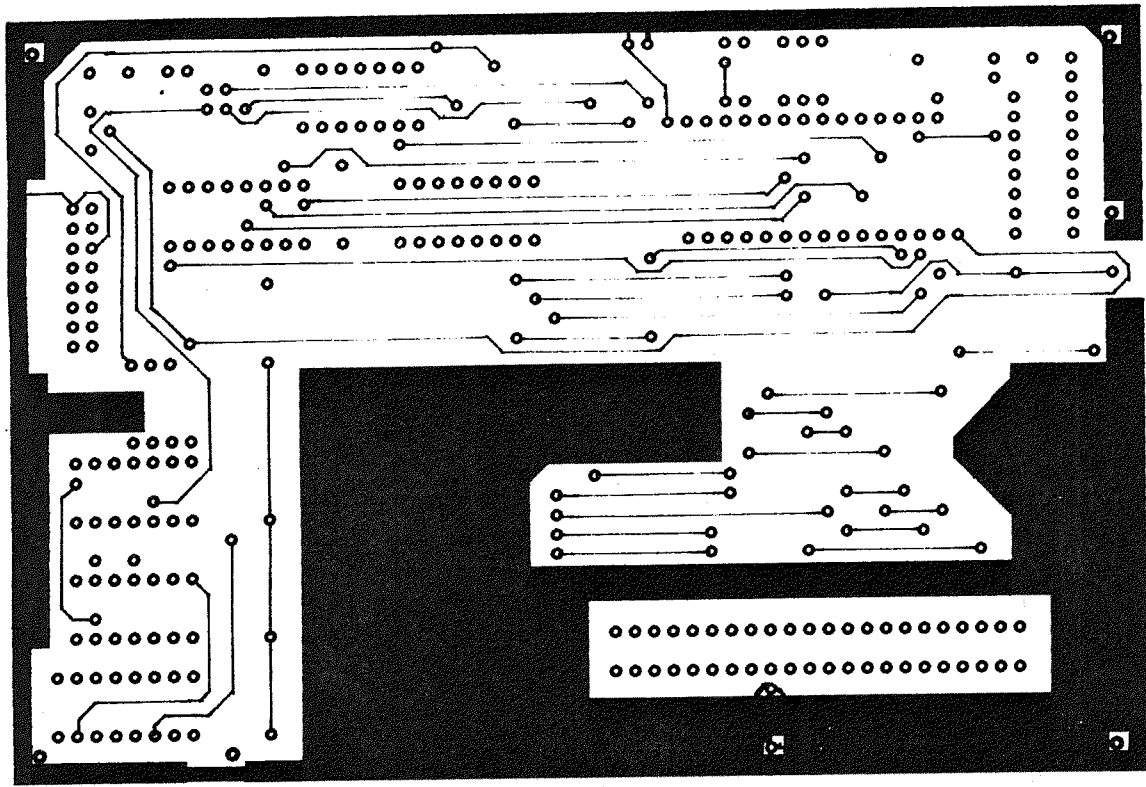
LED Hi brightness
Caps 0.1 Monolithic
Diodes 1N4148
Resistors 2.7k except
220Ω
mounting hole.

Edge Connector

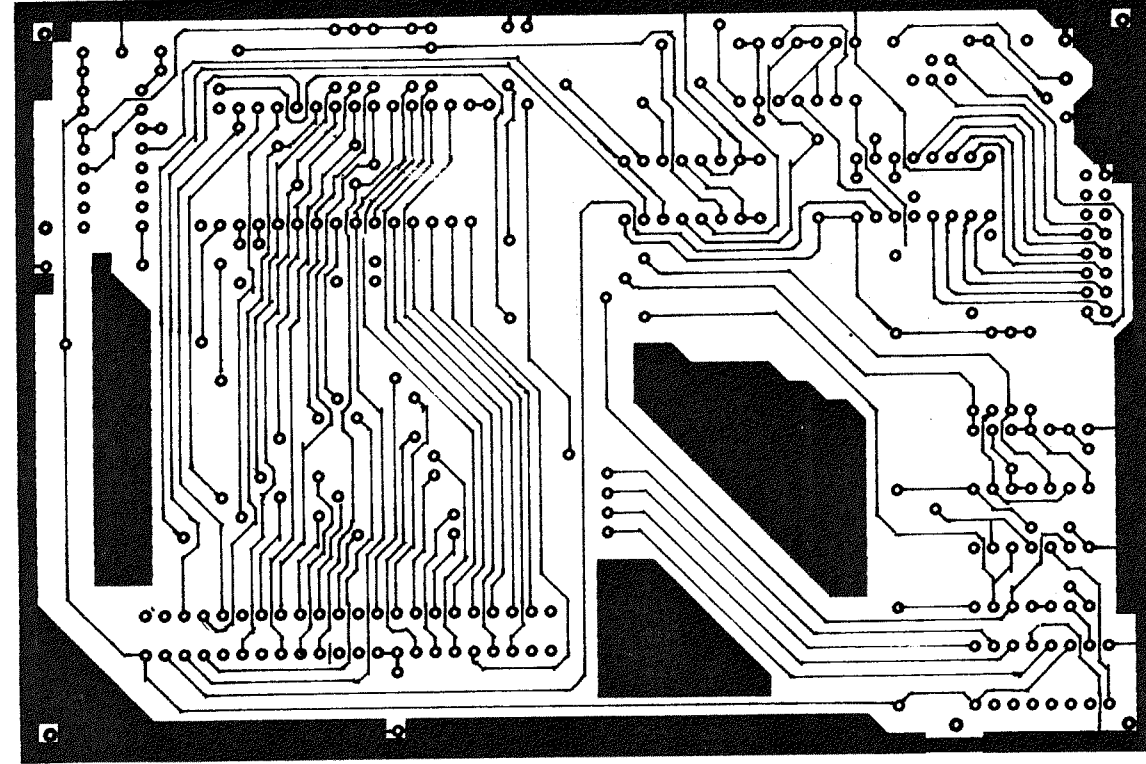
Case mounting holes if needed.

5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 5 0 7 0 5 0 8 0

5 0 1 5 2 0 5 3 0 5 4 0 5 5 0 6 0 5 7 0 5 8 0



5 0 5 2 0 5 3 0 5 4 0 5 5 0 6 0 5 7 0 5 8 0



5 0 5 2 0 5 3 0 5 4 0 5 5 0 6 0 5 7 0 5 8 0

