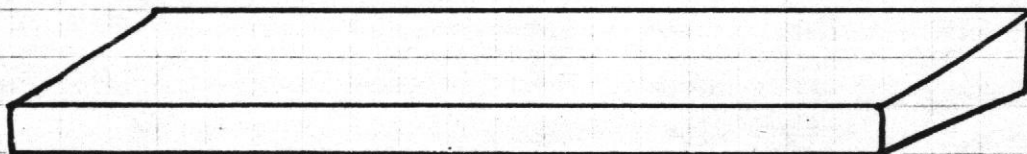
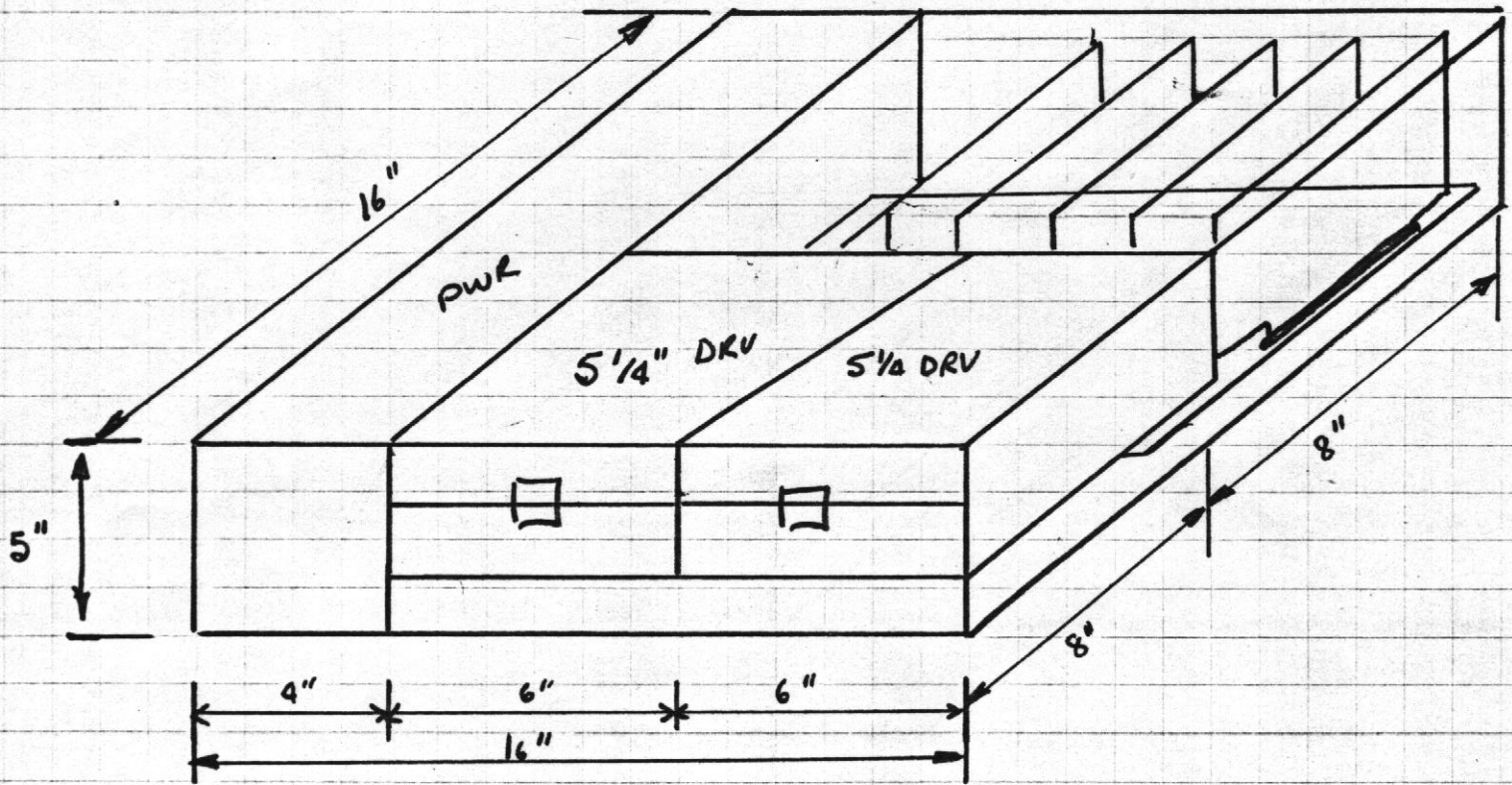


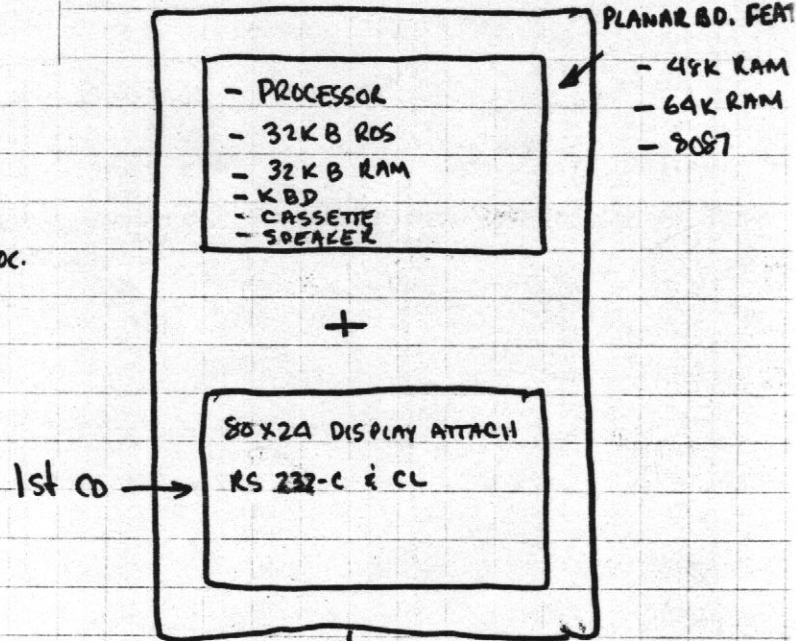
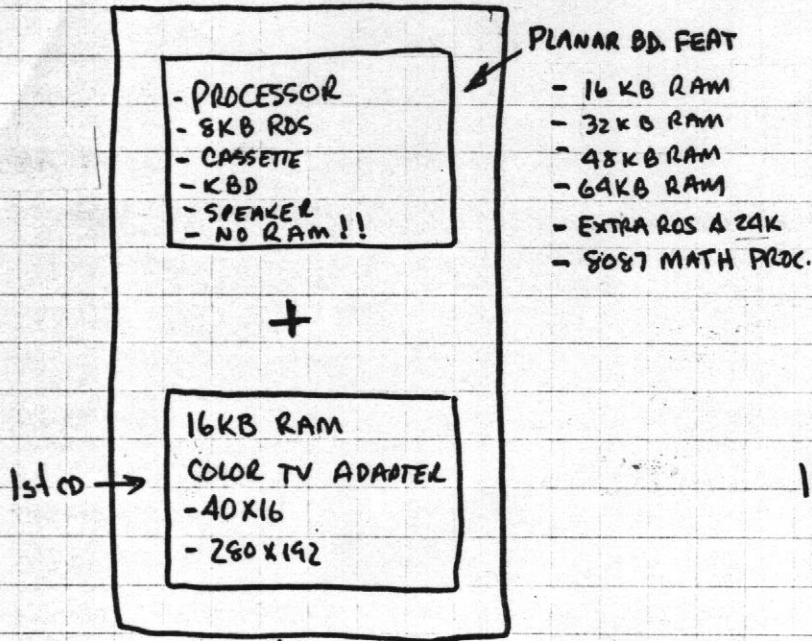
PHYSICAL PKG



KBD

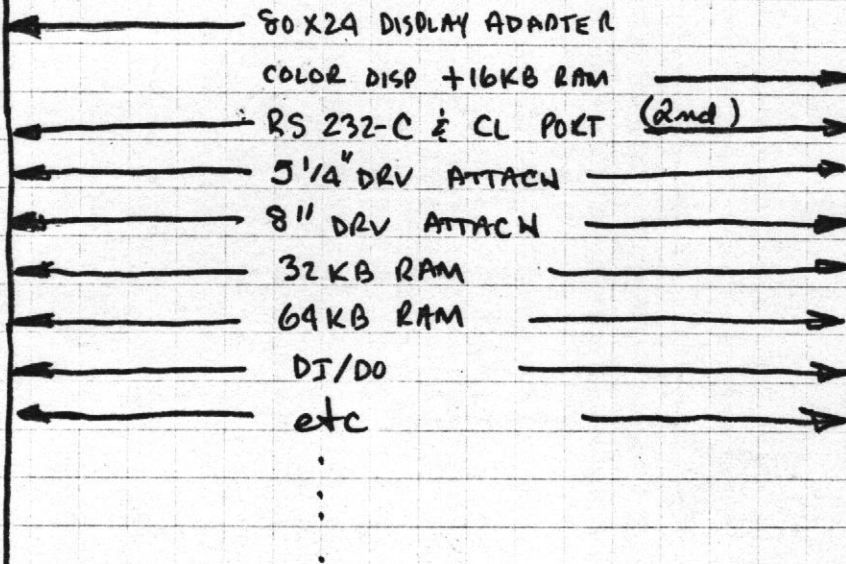
PERSONAL CASSETTE SYSTEM

BUSINESS SYSTEM

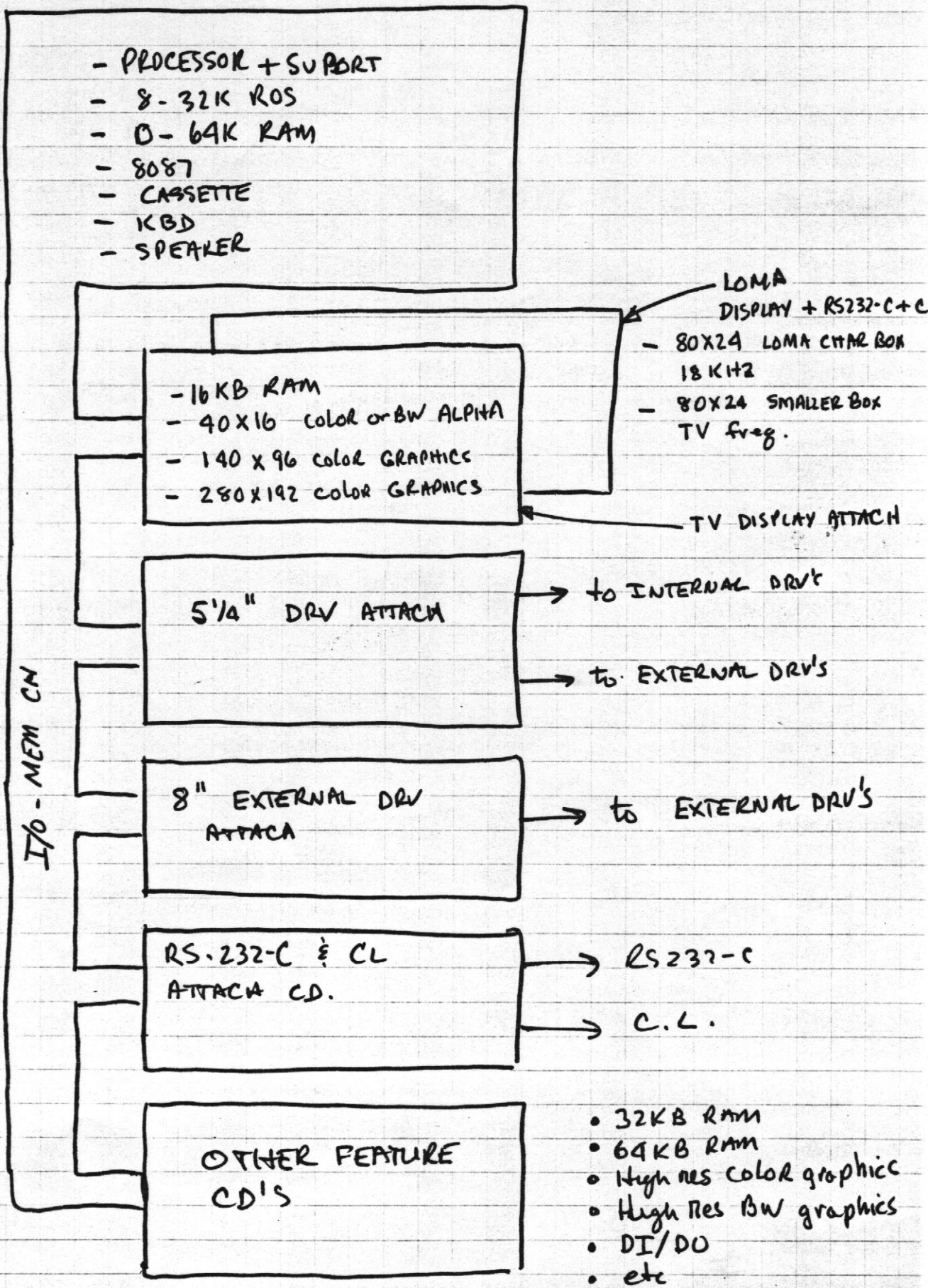


FEATURES

4 FEAT SLOTS CHANNEL



SYSTEM DIAGRAM



Base Planar Board:

Size: $\approx 7 \times 9$ " or $\frac{1}{2}$ PLANAR

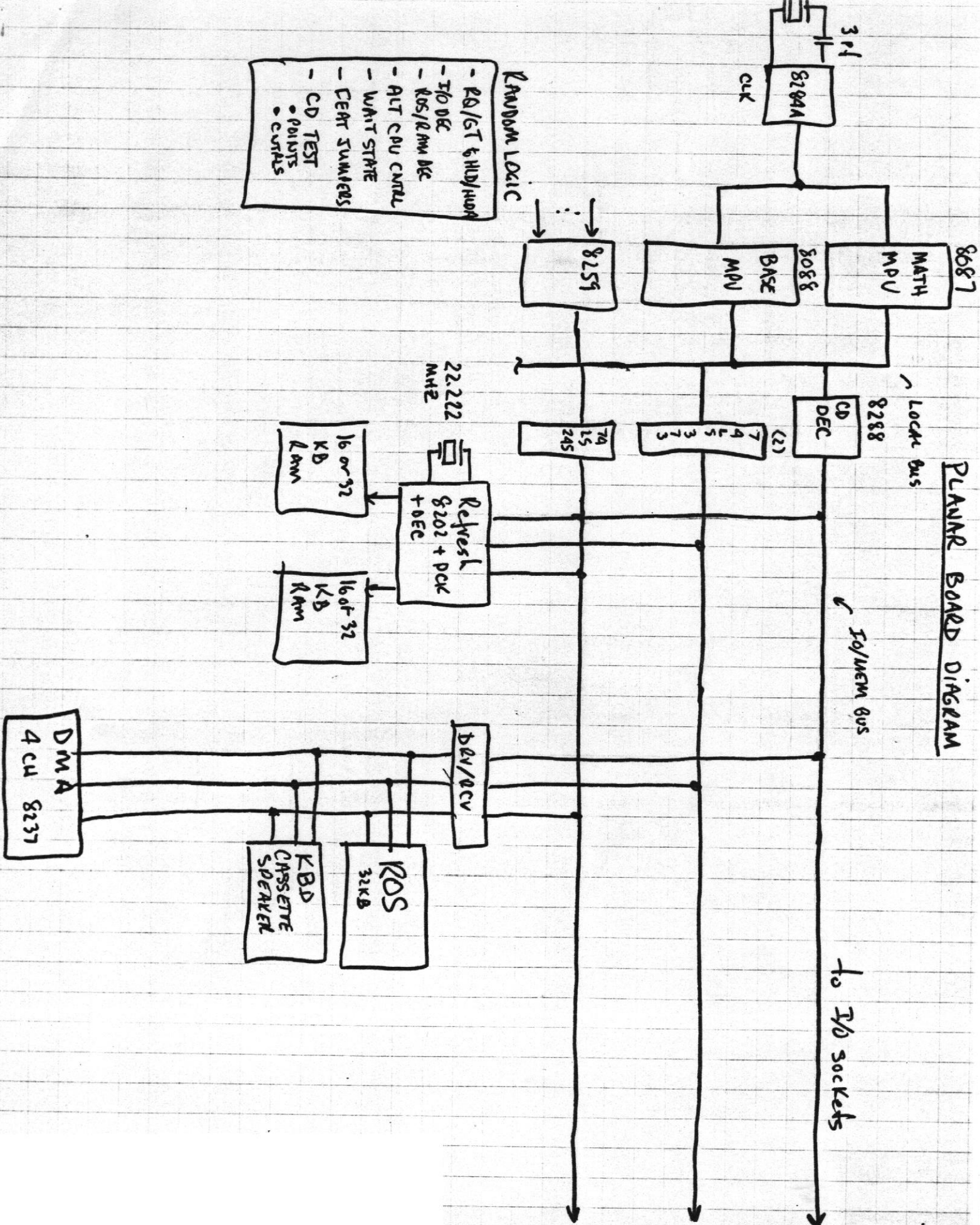
PKg: 1 LPC. 2 SIDES. +5 & GND PLANE.
+12, -12, -5 ARE PART OF +5 PLANE.

(OBJECTIVE OF 1 LPC COULD GO TO 2 LPC)

FUNCTION ON PLANAR:

- 8088 MPU
- 8284 CLK CHIP + 14.318 MHZ XTAL
- 8288 BUS CONTROLLER
- SOCKET FOR 8087 MATH PROCESSOR
- SOCKETS FOR UP TO 32KB ROS OR 4, 8Kx8 24 PIN MOD.
- SOCKETS FOR UP TO 64KB X 9 RAM 18 sockets of 18 PIN MOD.
 - . 16KB - 9 16Kx1
 - . 32KB - 9 32Kx1
 - . 48KB - 9 16Kx1 + 9 32Kx1
 - . 64KB - 18 32Kx1
- POWER CONN. SOCKET
- KBD CONN.
- CASSETTE IN/OUT
- PINS FOR SPEAKER ATTACH
- BUS REPOWER LOGIC
- 8 LEVEL INTR 8259A
- 4 CH. DMA CNTRL 8237-5
- RQ/GT to HOLD/HOLDA CNTRL.
- RAM PCK Parity
- KEY BOARD INTERFACE (Serial)
- CASSETTE INTERFACE DPC DI/DO B.I
- PARITY CK ON MEMORY
- BUS STEERING CNTRL LOGIC
- ADVANCE MEMORY RD LOGIC
- FEATURE SELECT JUMPERS
- Refresh CONTRL FOR RAM 8202A

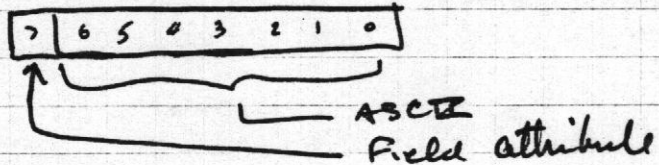
PLANNER BOARD DIAGRAM



COLOR TV ATTACH CD.

• ALPHA MODES

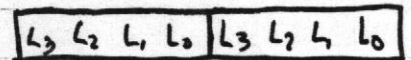
- 40 CHAR'S/LINE x 16 LINES
- 7x12 CHAR BOX
- 5x7 CHAR CAP
- LOWER CASE CHAR HAVE 2 descenders
- FULL ASCII upper & lower case CHAR SET
- Field attributes
 - BLINK
 - Select ALT BACKGROUND COLOR
 - Select ALT CHAR COLOR
- BACKGROUND COLOR & ALTERNATE COLOR PRESELECTED FROM 2 of 16 POSSIBLE COLORS
- 640 Bytes of 16KB RAM used for Display Buffer



• GRAPHICS MODES

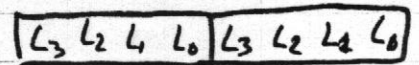
• LOW RES

- 70 x 48
- 1 of 16 colors each box
- 1680 Bytes 16K



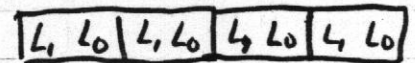
• MED. RES A

- 140 x 96
- 1 of 16 color each box
- 6720 Bytes of 16K



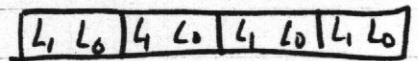
• MED RES B

- 140 x 96
- 1 of 4 color each box
- 3360



• High Res

- 280 x 192
- 1 of 4 color
- 13,440 Bytes of 16K USED



5 1/4" DRV CD.

- 2 internal DRV's
- 2 external DRV's
- NON overlapped seeks on internal But possible on internal external pair
- Design for: and understand cost trade offs of:
 - std mini floppy speeds of
 - 32 μ s / byte FM
 - 16 μ s / byte FM
 - 8 μ s / byte MFM
 - 35/40/77 track
 - 1 or 2 sided
- Want DRV competitive with Apple 143KB DRV.
- use the DMA CH
- use Interrupt hand
- Fit on 4x8 CD
- Must use Daisy chain attach method on internal pair but separate Daisy chain channel for external
- must control motor on/off.
- is VFO needed and on what types & speeds of DRV's.
- More than on attach CD is OK ie:
 - FM
 - MFM
 - 2 sided MFM

Keyboard

- MODIFY KEYBOARD □

- SEE if COST SAVINGS if Leftmost Functions Key ELIMINATED
- IS SIZE REDUCED
- CHANGE TO SERIAL INTERFACE
- ASCII Keytops