



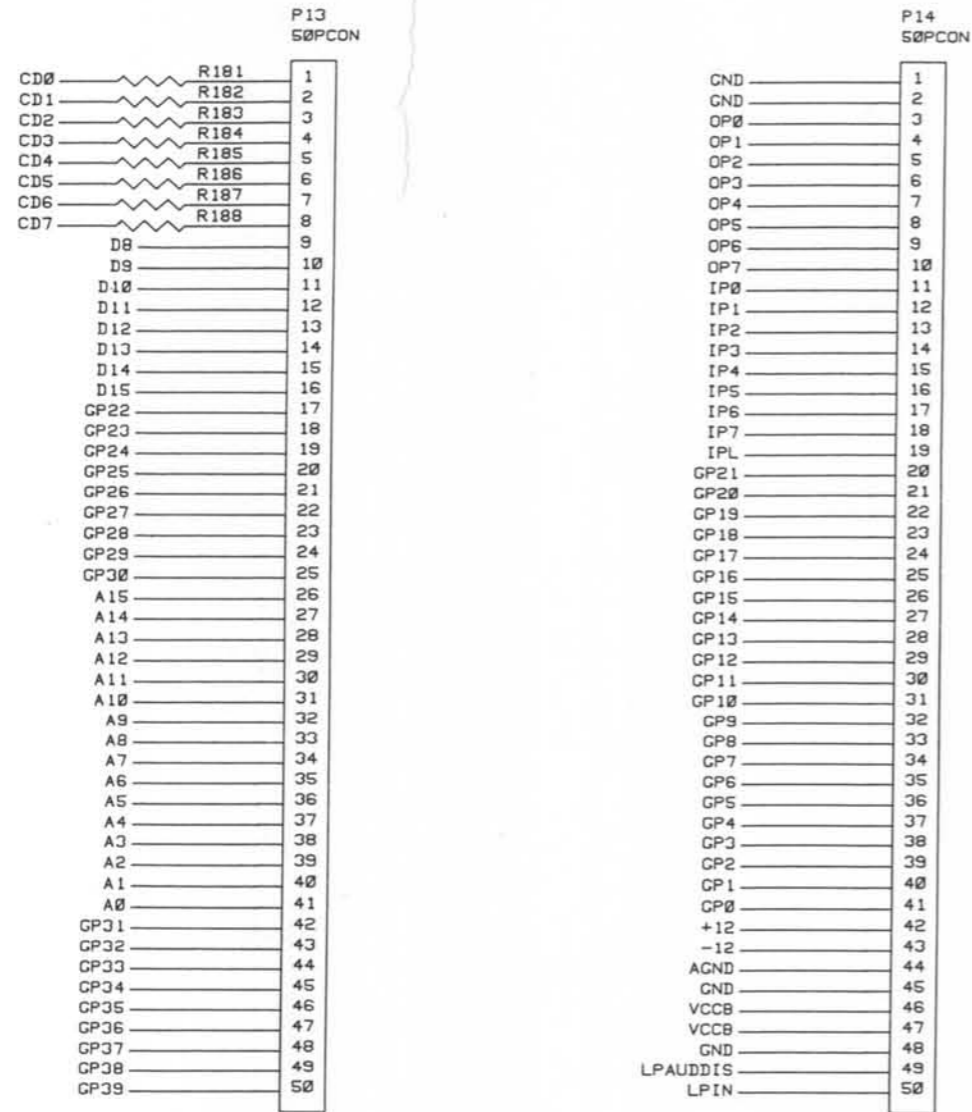
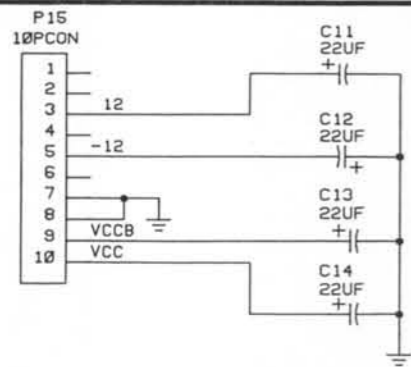


1. All resistors are rated at 1/4-watt and have a tolerance of 5% unless otherwise noted. Resistor values are in ohms (k = 1000).
2. Capacitor values less than 1 are in  $\mu\text{F}$  (microfarads). All other capacitor values are in pF (picofarads) unless otherwise noted.
3.  This symbol indicates circuit board ground.
4.  This symbol indicates chassis ground.
5.  This symbol indicates a DC voltage taken with a high-input-impedance voltmeter from the point indicated to circuit board ground.
6. \* This symbol indicates a voltage that will vary with the load.
7. Components within the shaded area are critical to product safety. Replace them only with a Heath replacement part, or an exact equivalent.
8. Note 1: Jumper wires J3, J4, and J5 connect C104 to +20 volts.
9. Note 2: Jumper wires J6, J7, and J8 connect C108 to -20 volts.

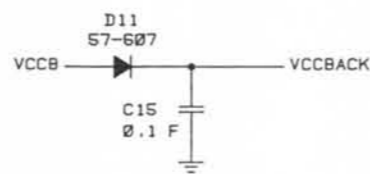
**Schematic #1**  
**Trainer Power Supply Circuit Board**



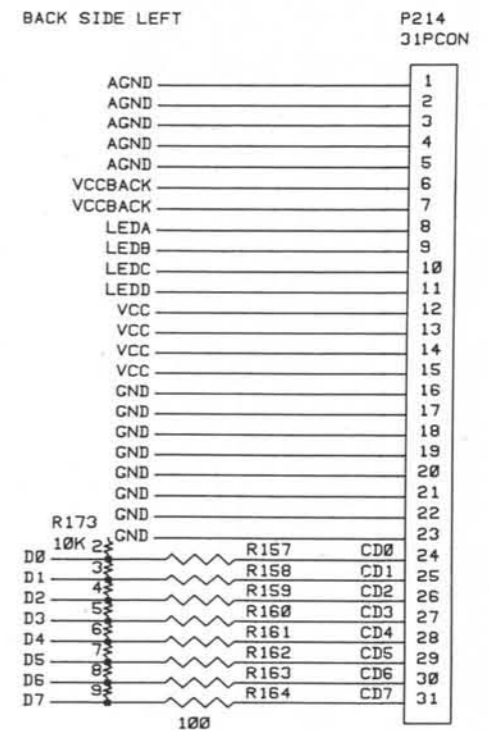
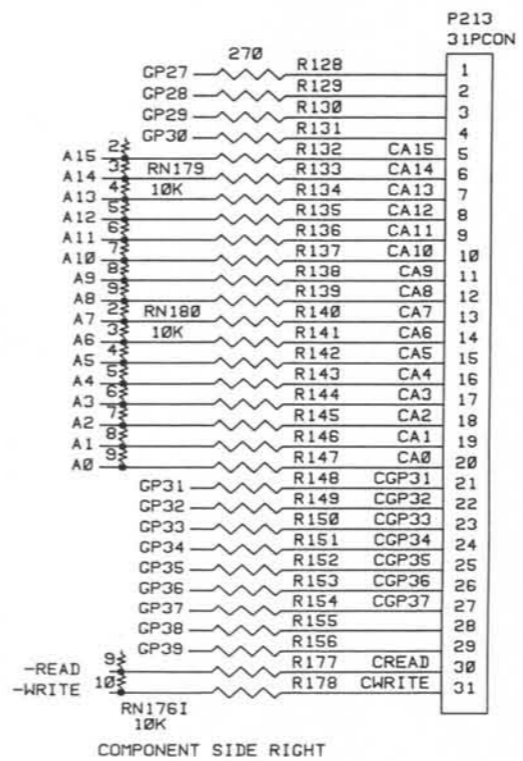
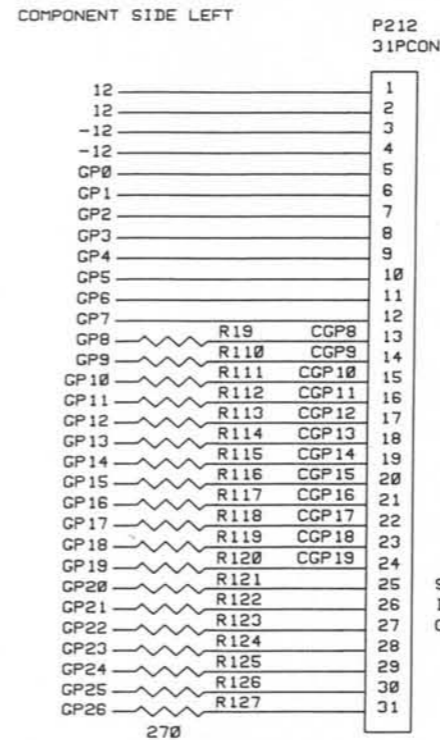
GENERAL PURPOSE SIGNAL BLOCKS



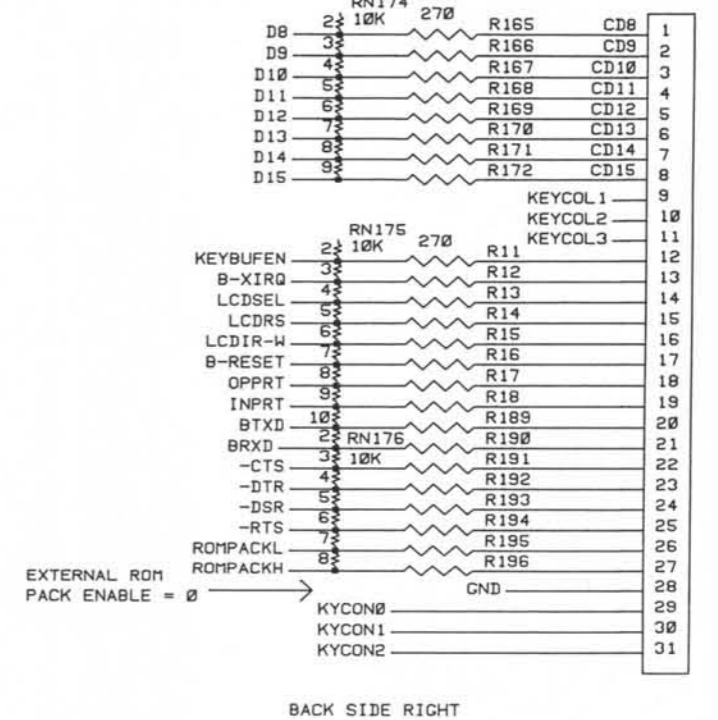
DC POWER IN



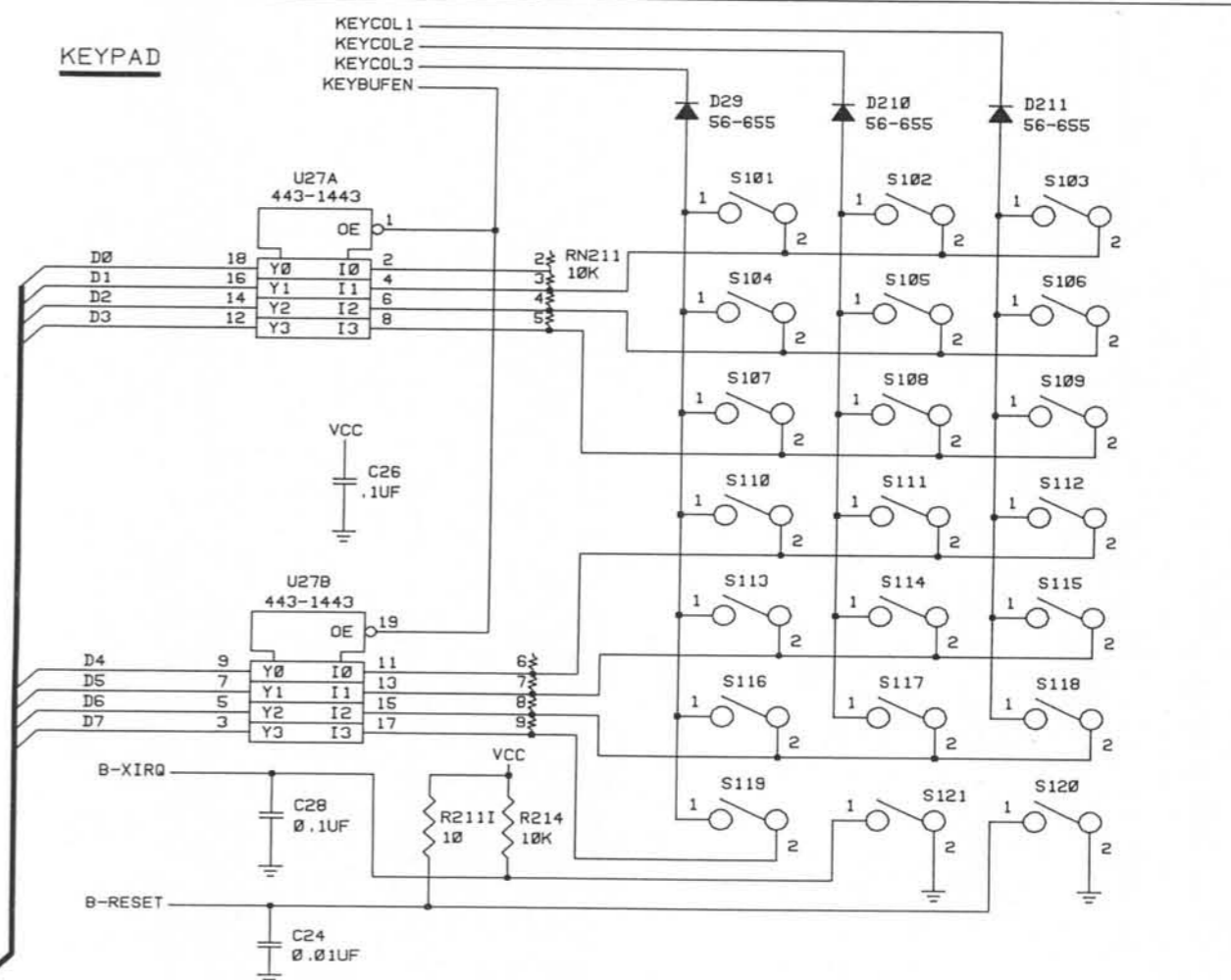
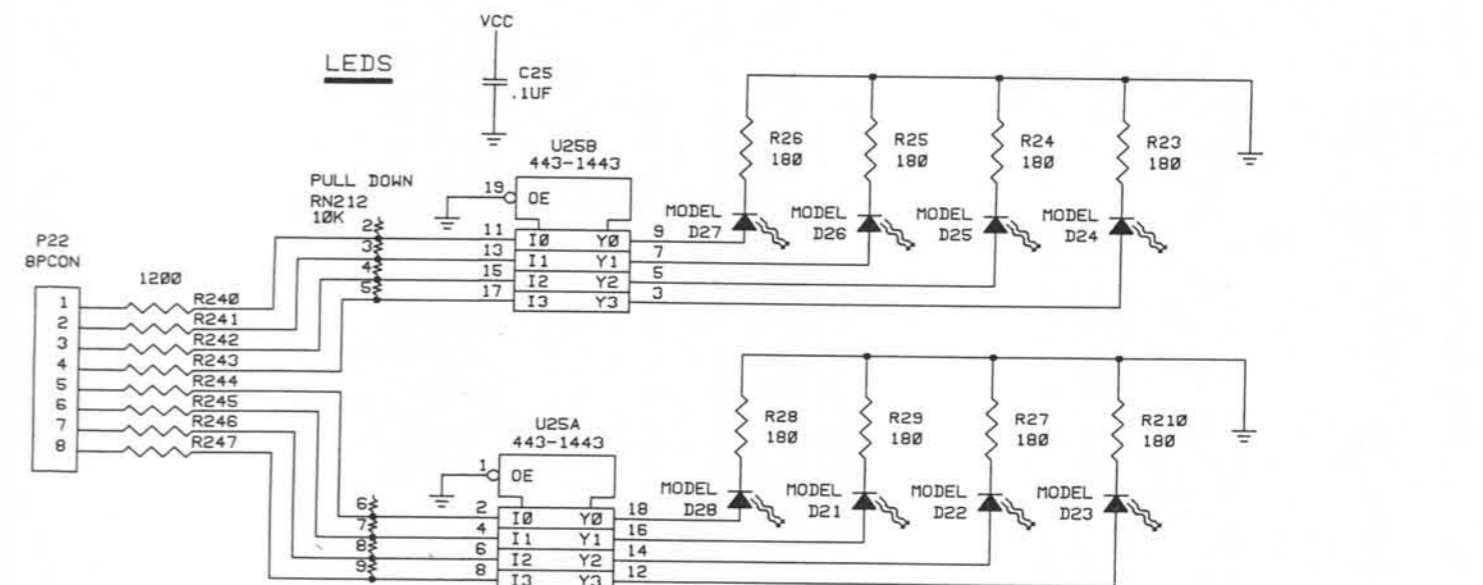
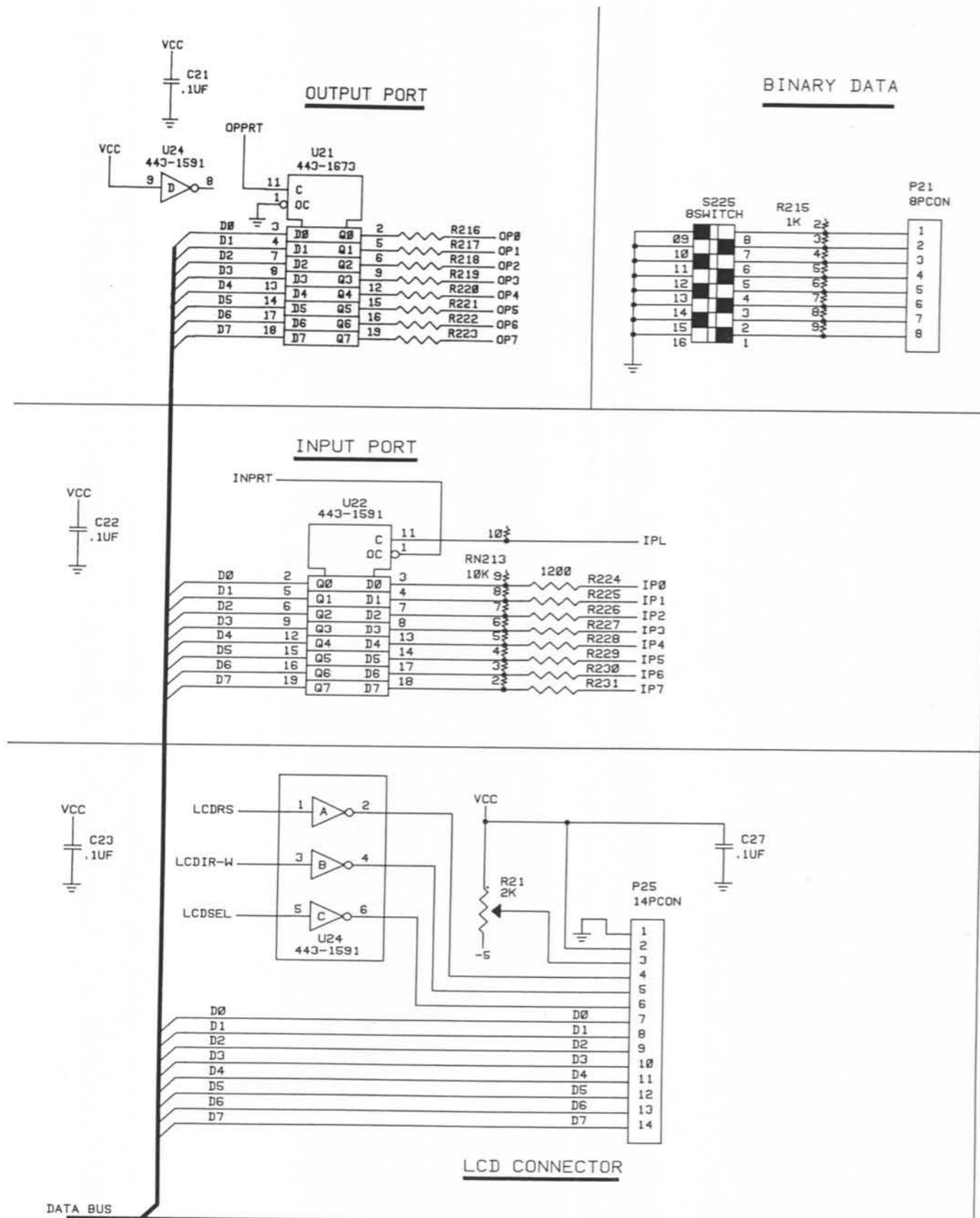
POWER NOTATION DEFINITION  
 VCC- MAIN +5 VOLT SUPPLY  
 VCCB- BREADBOARD +5 VOLT SUPPLY  
 VCCA- ANALOG +5 VOLT SUPPLY



PROCESSOR CARTRIDGE SOCKET

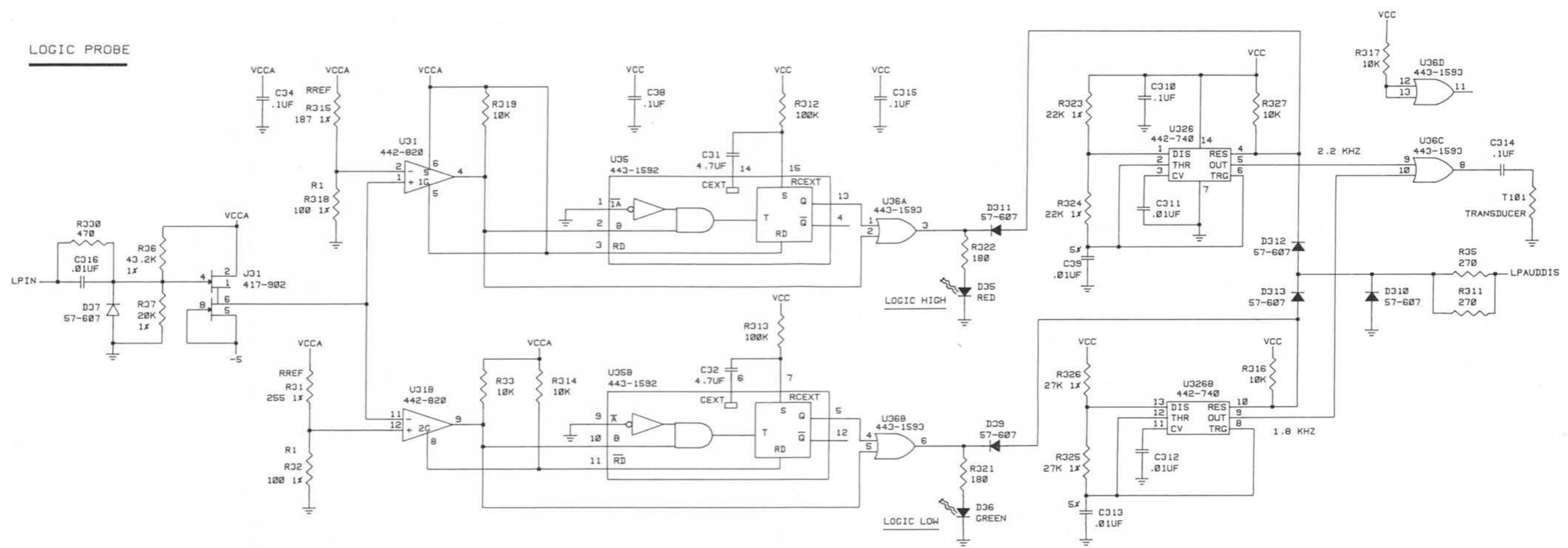


Schematic #2  
Trainer

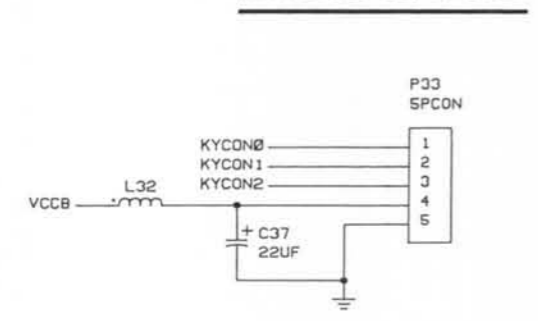


**Schematic #3**  
**Trainer**  
Part of 595-4330

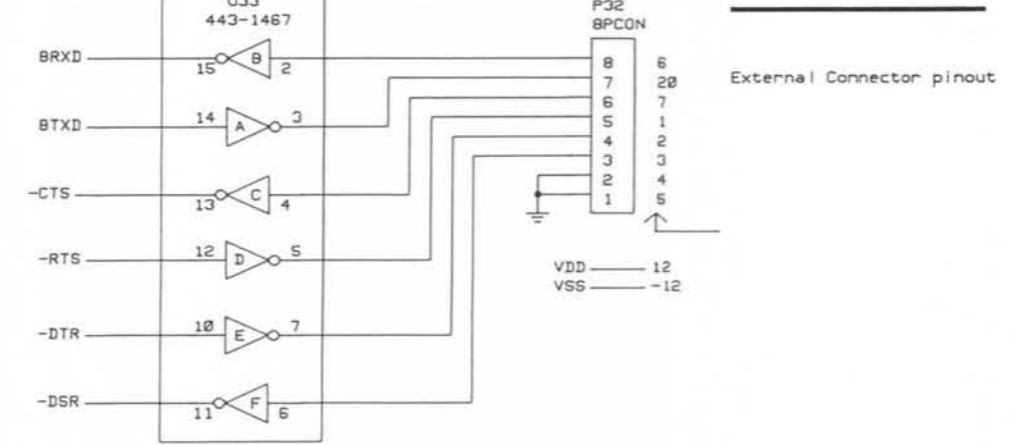
**LOGIC PROBE**



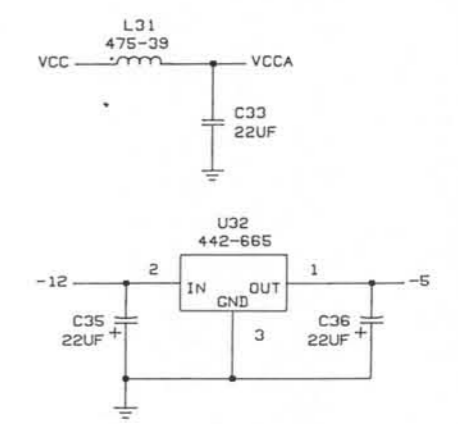
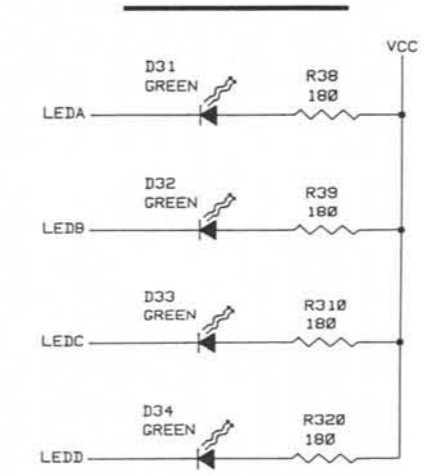
**KEYBOARD CONNECTOR**



**RS-232 INTERFACE**



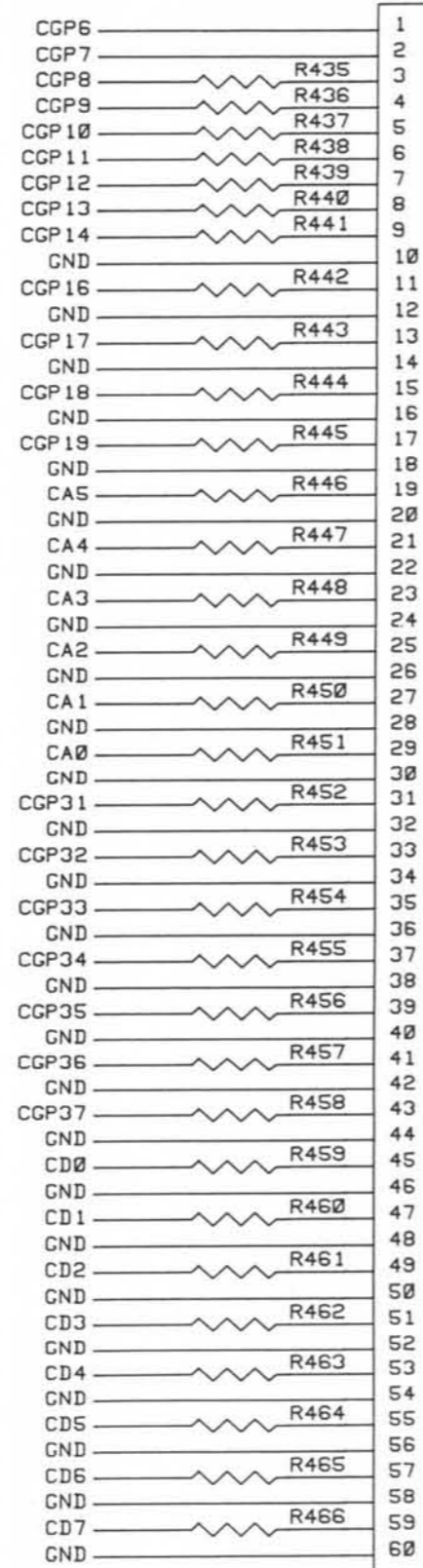
**CPU INFO LED'S**



**Schematic #4  
Trainer**

BACKPACK CONNECTOR

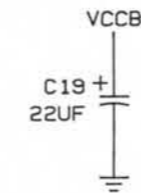
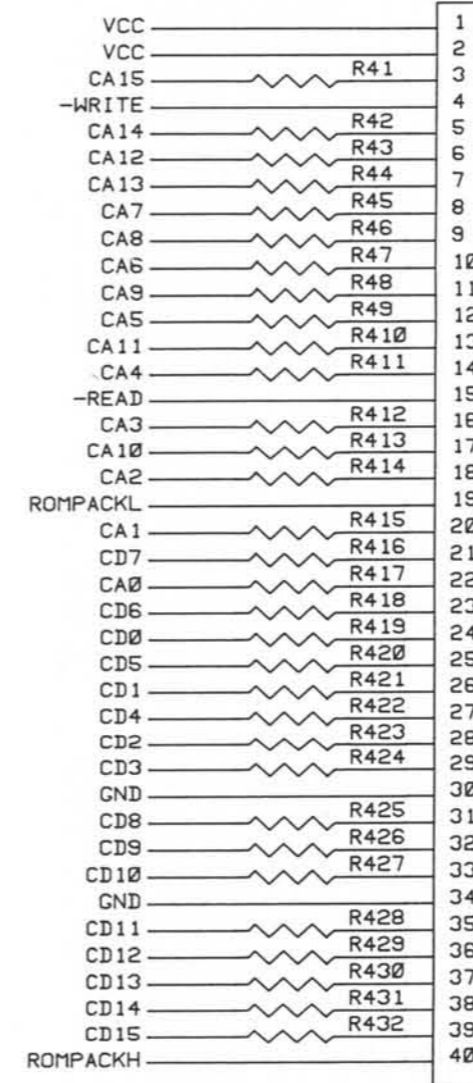
P11  
60PCON



MEMORY CARTRIDGE

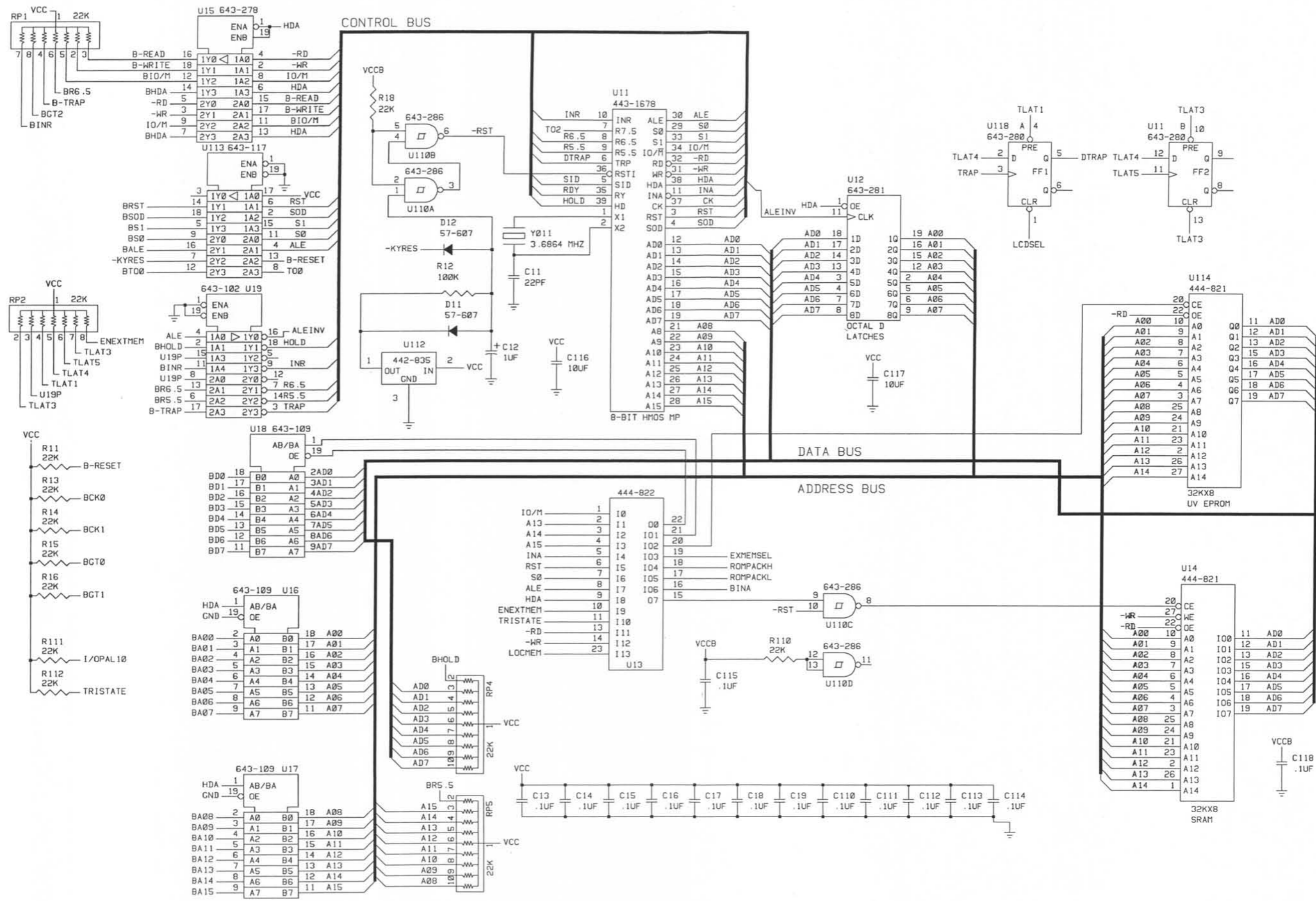
SOCKET

P12  
40PCON



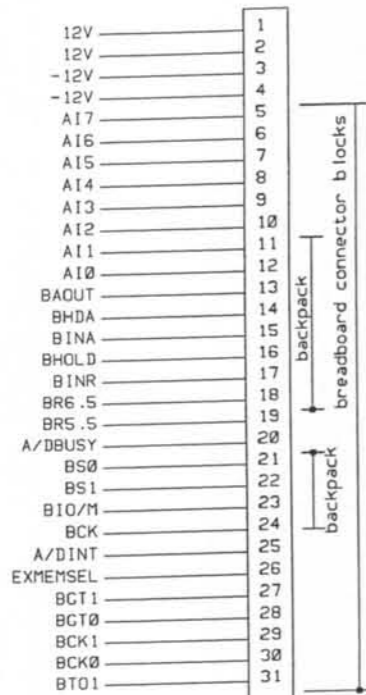
Schematic #5  
Trainer



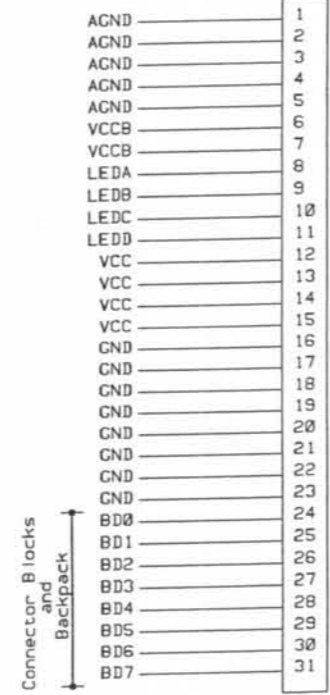


Schematic #6  
CPU Module

COMPONENT SIDE LEFT p212



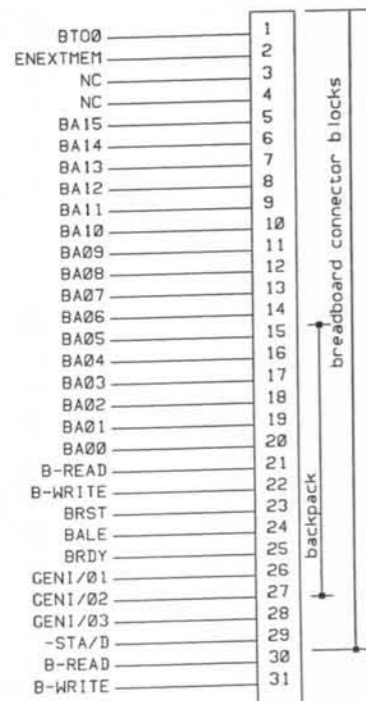
BACK SIDE LEFT p214



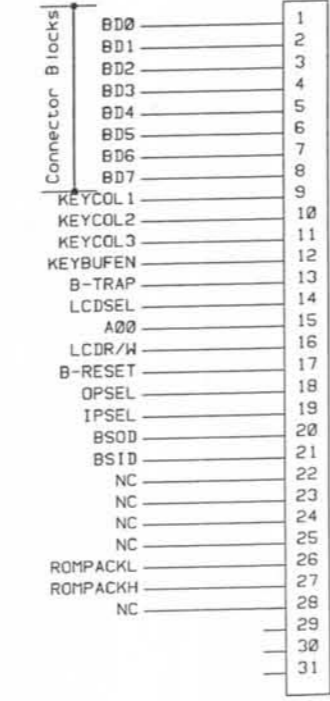
p213

EDGE BOARD CONNECTORS

p215

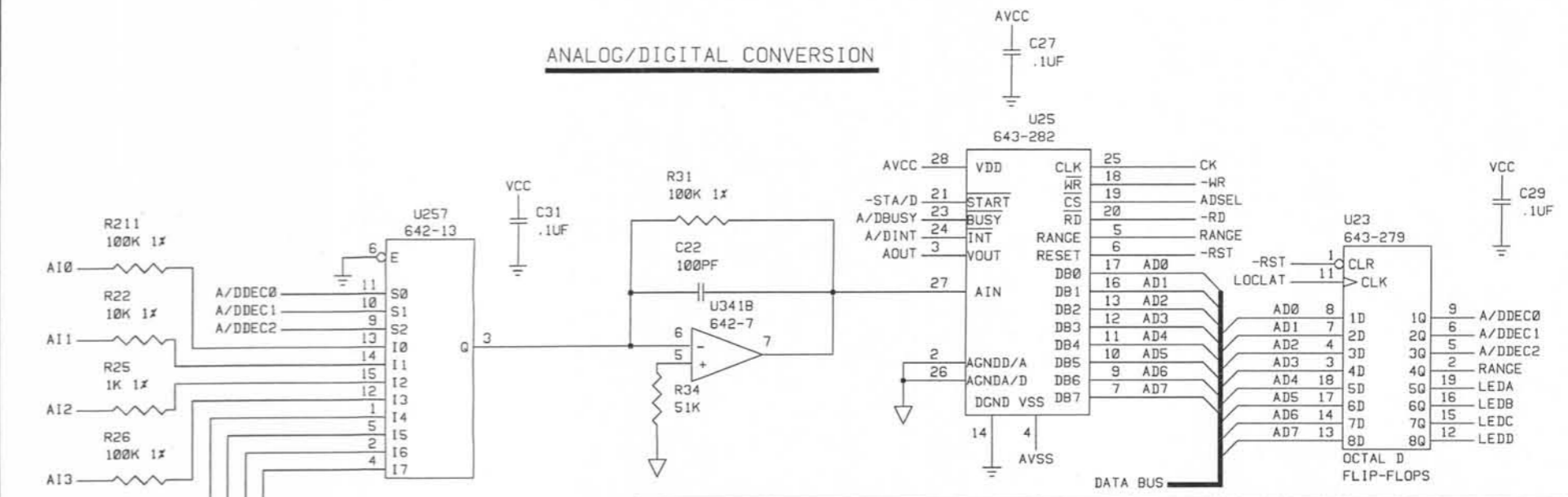


COMPONENT SIDE RIGHT

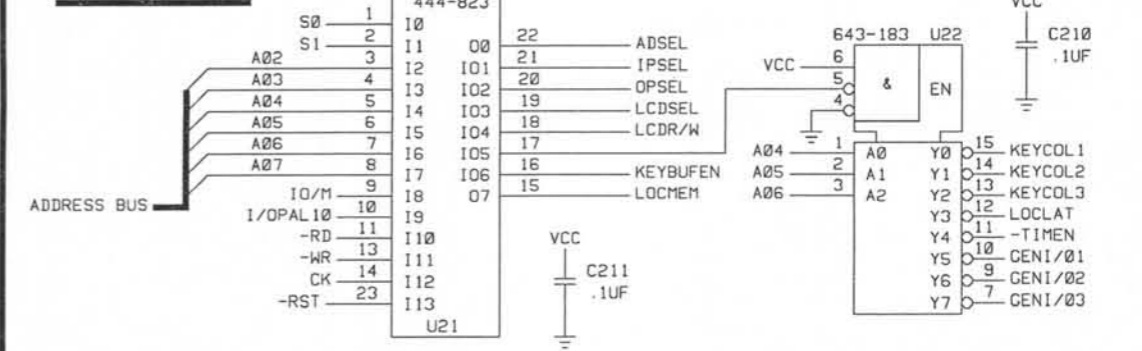


BACK SIDE RIGHT

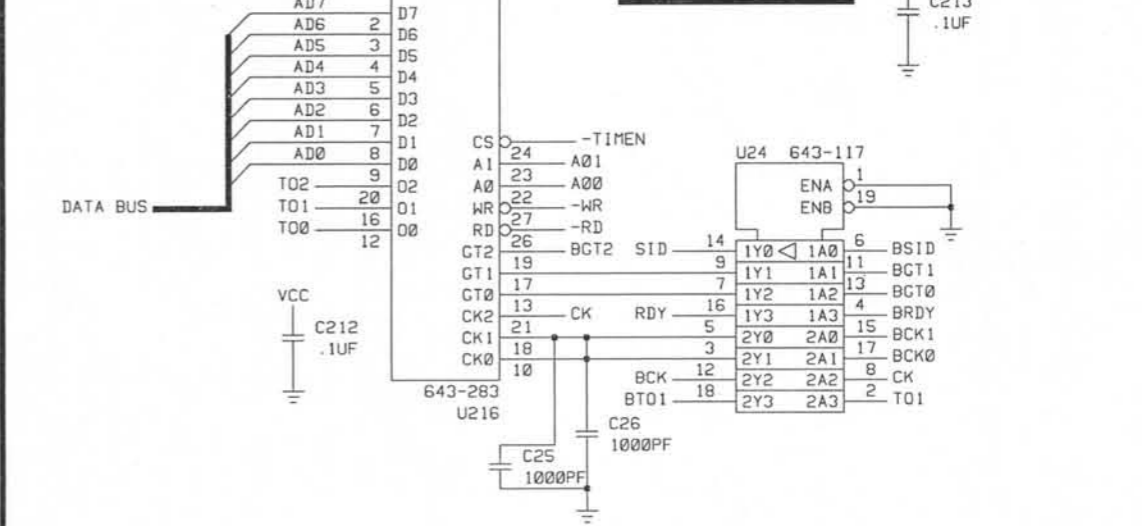
### ANALOG/DIGITAL CONVERSION



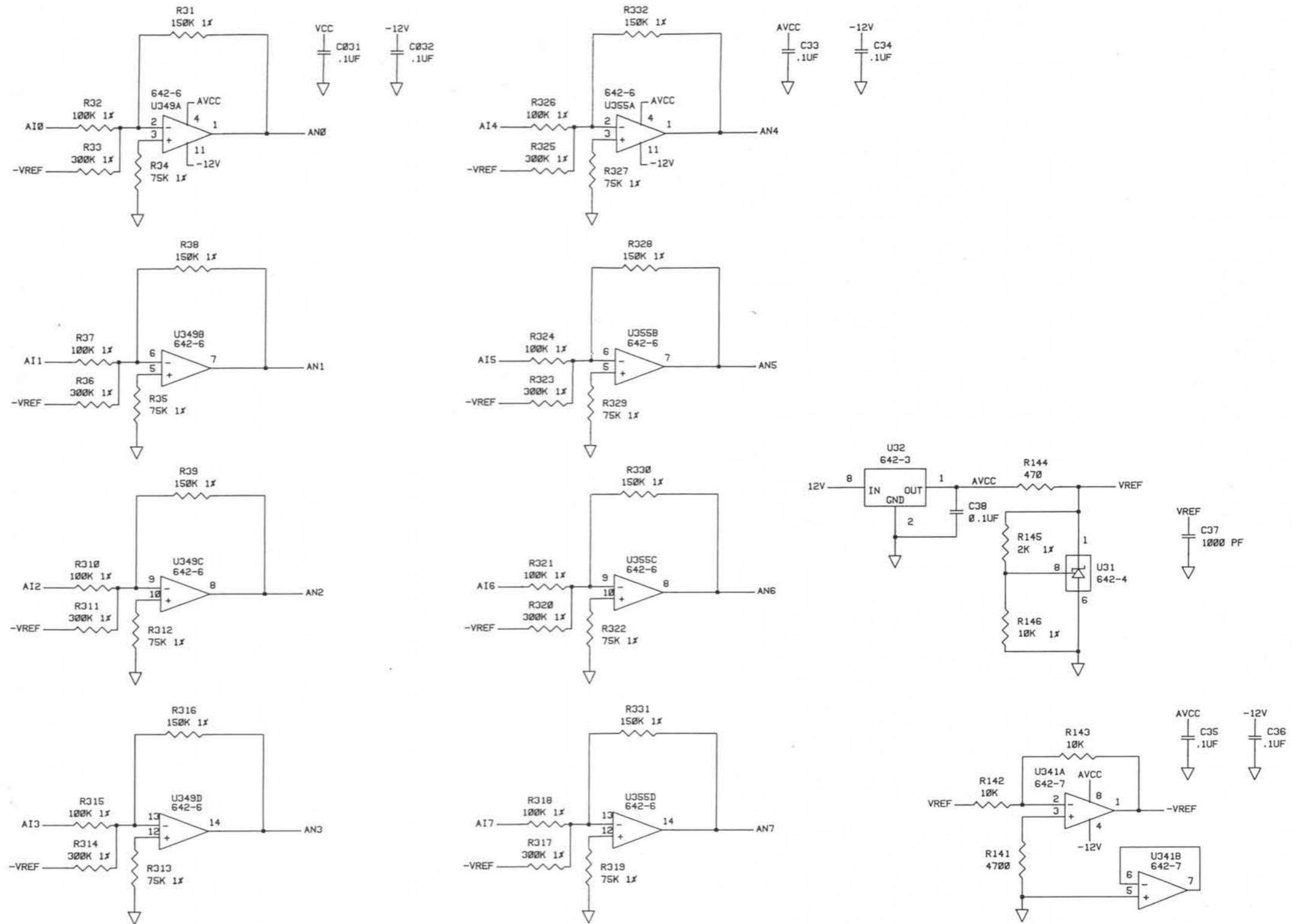
### I/O DECODING



### TIMER SUBSYSTEM

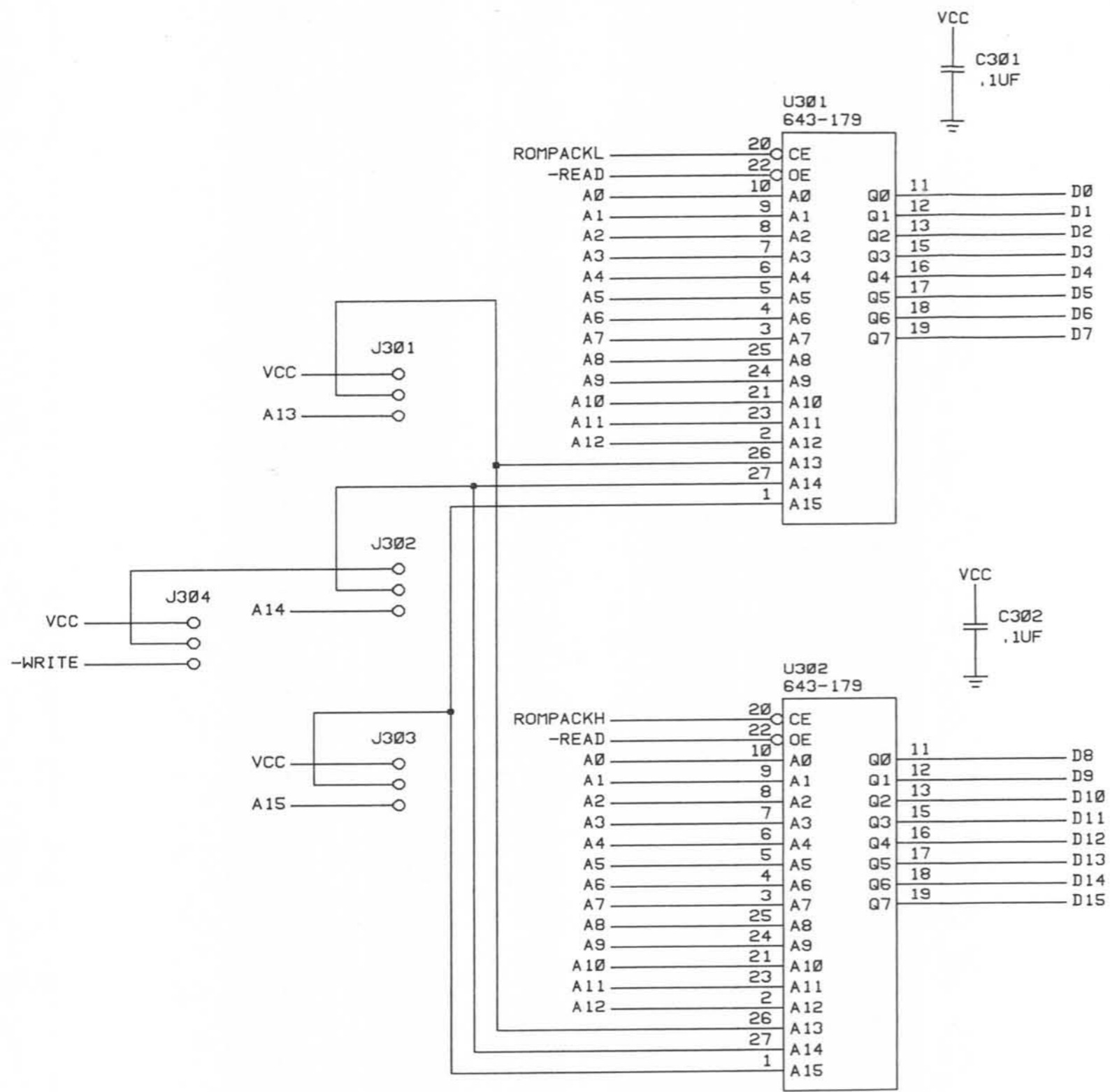


Schematic #7  
CPU Module



Schematic #8  
CPU Module





Schematic #9  
Memory Module

