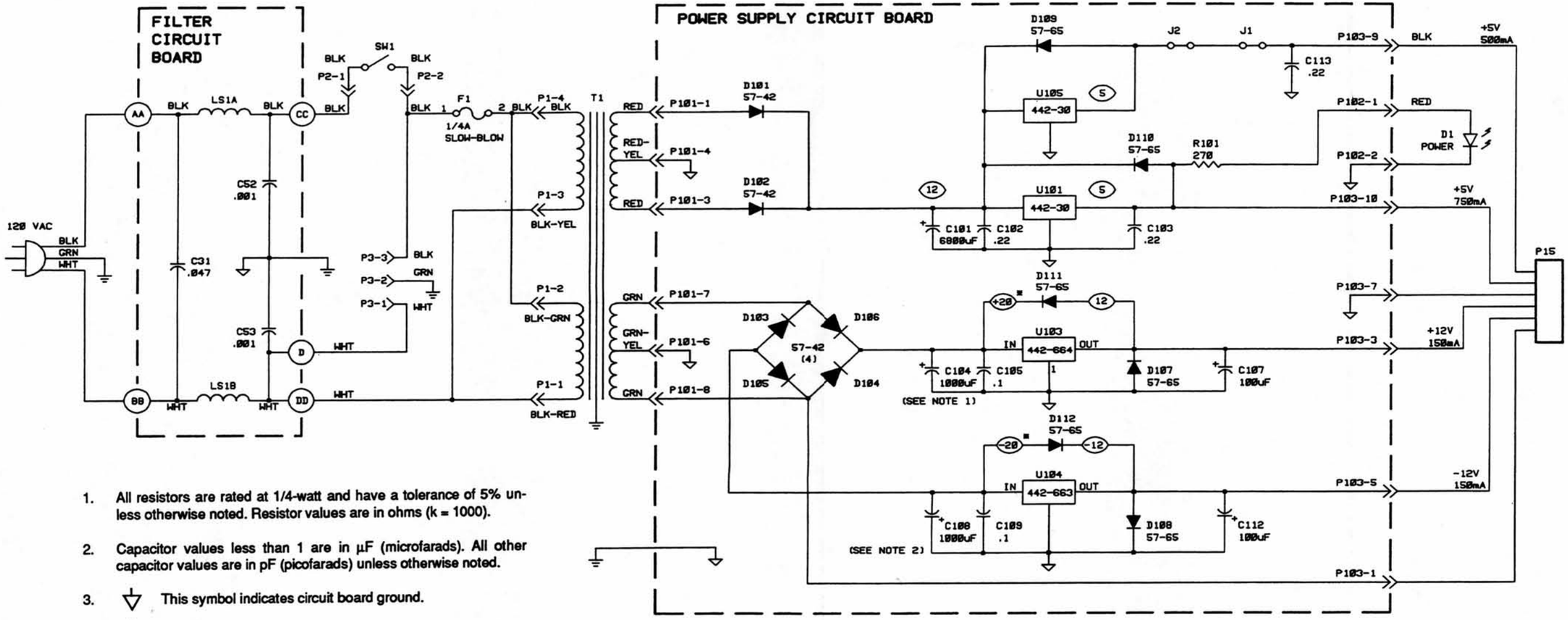
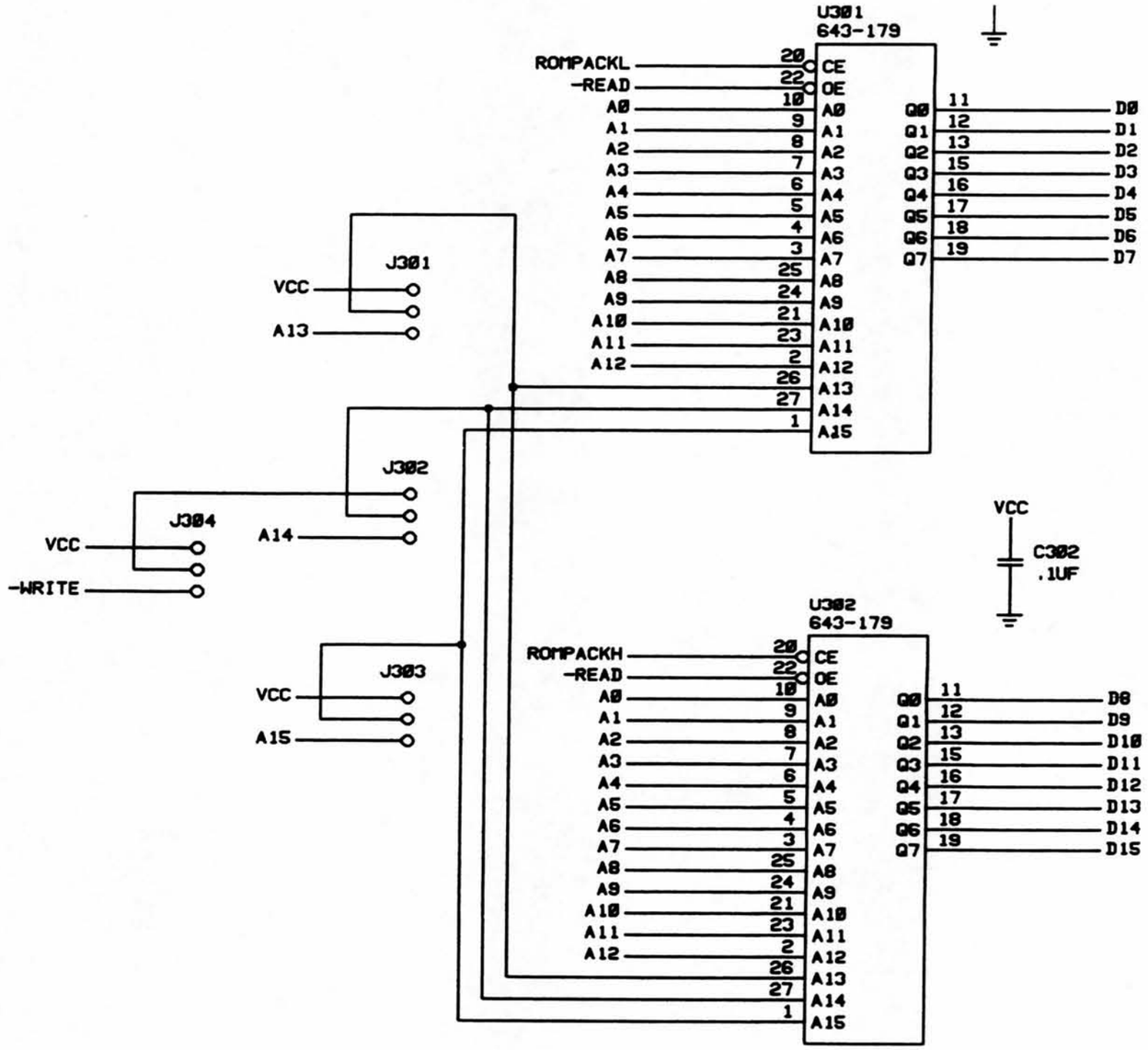


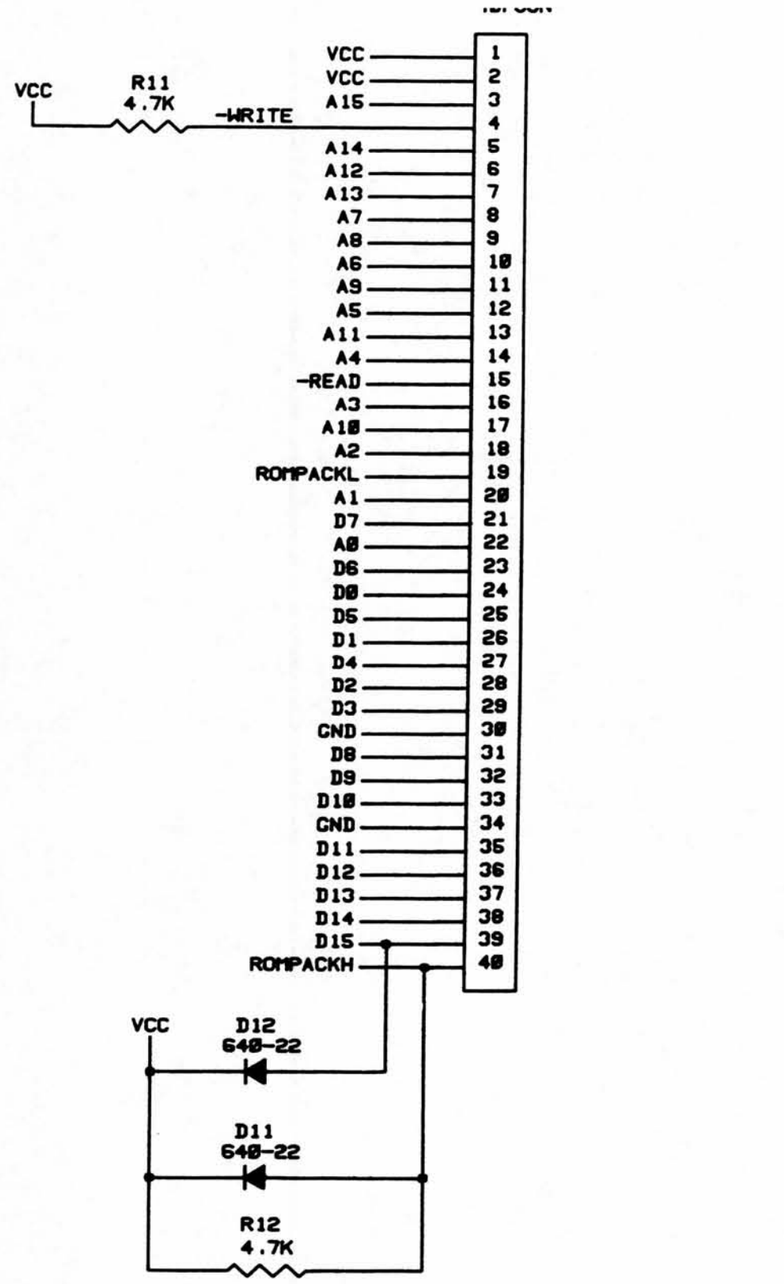
1. All resistors are rated at 1/4-watt and have a tolerance of 5% unless otherwise noted. Resistor values are in ohms (k = 1000).
2. Capacitor values less than 1 are in µF (microfarads). All other capacitor values are in pF (picofarads) unless otherwise noted.
3. ⏚ This symbol indicates circuit board 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

Part of 595-4170-4

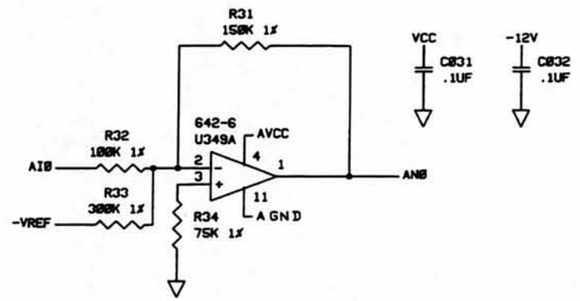


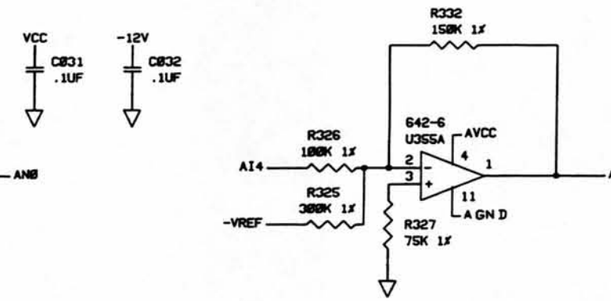


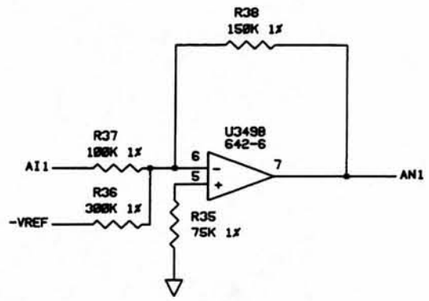
SCHEMATIC #9

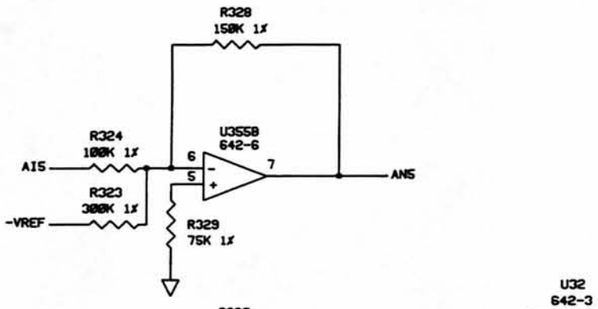
Memory Module

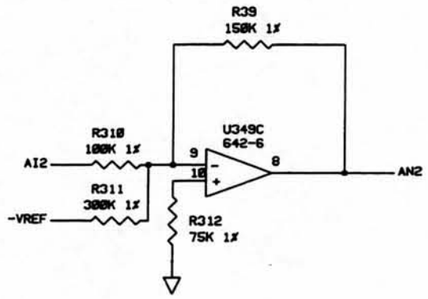
Part of 595-4170-4

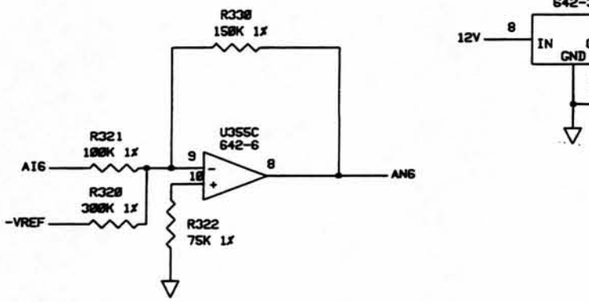


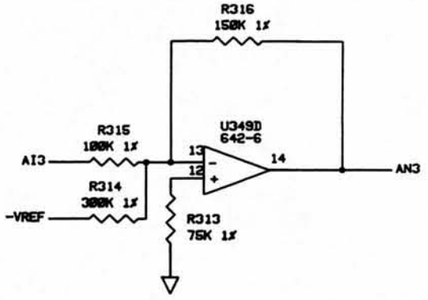


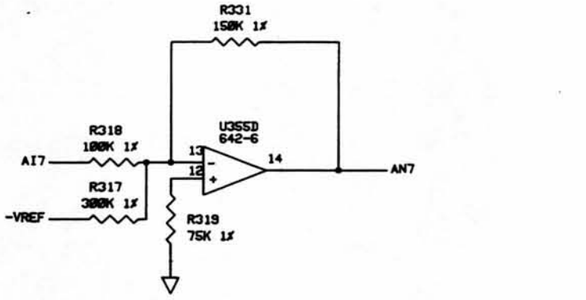


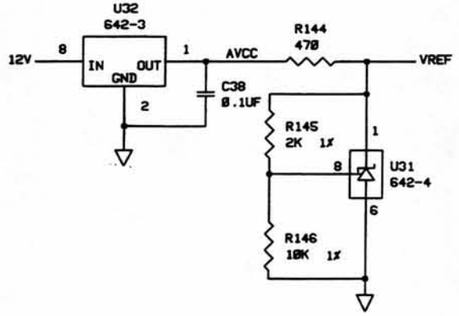


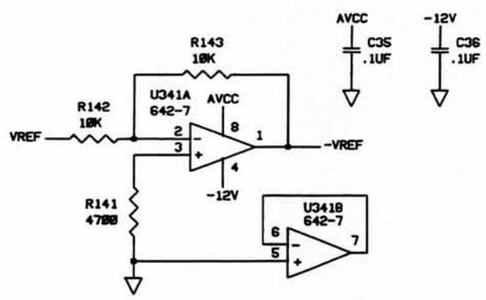








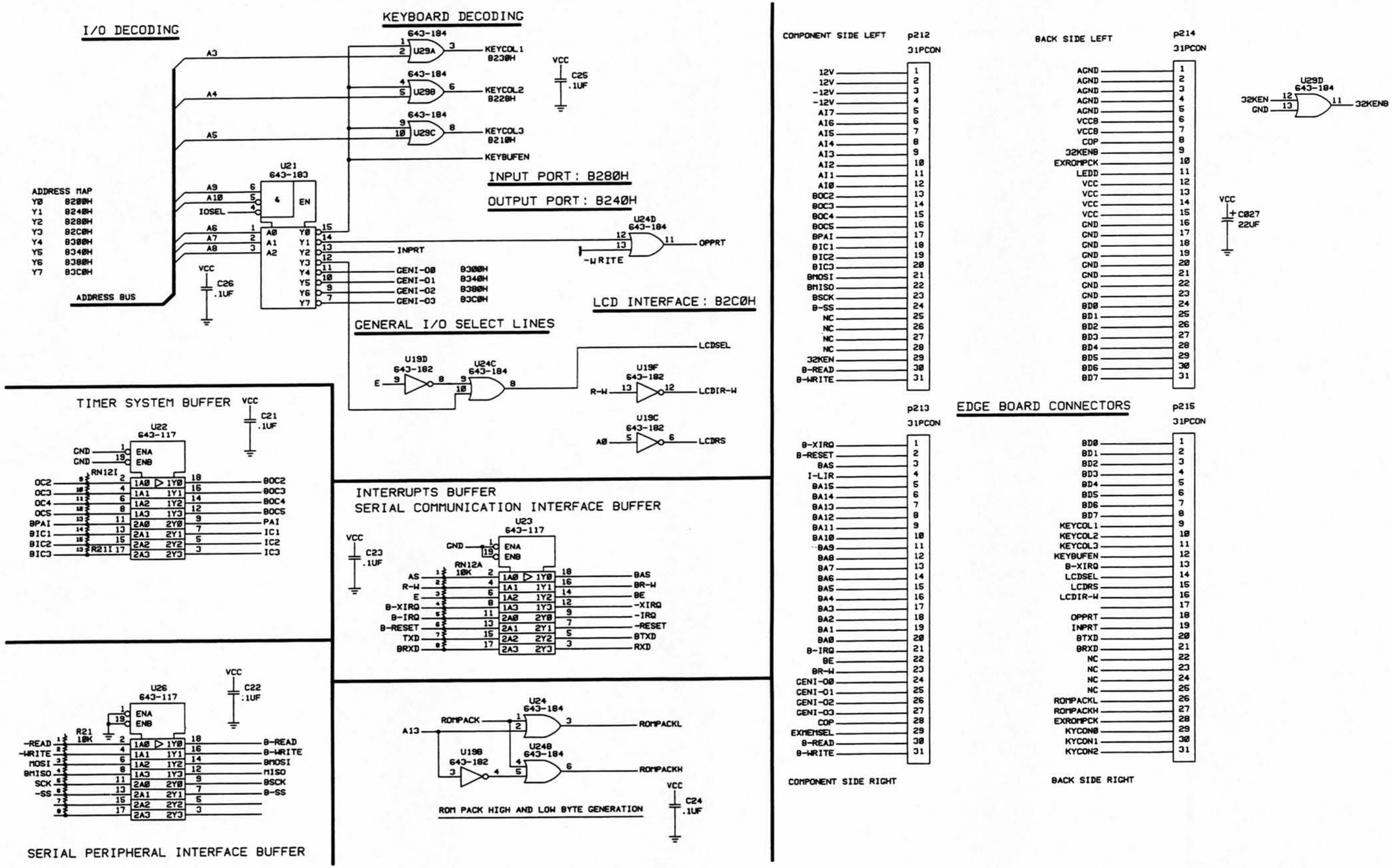




SCHEMATIC #8

CPU Module

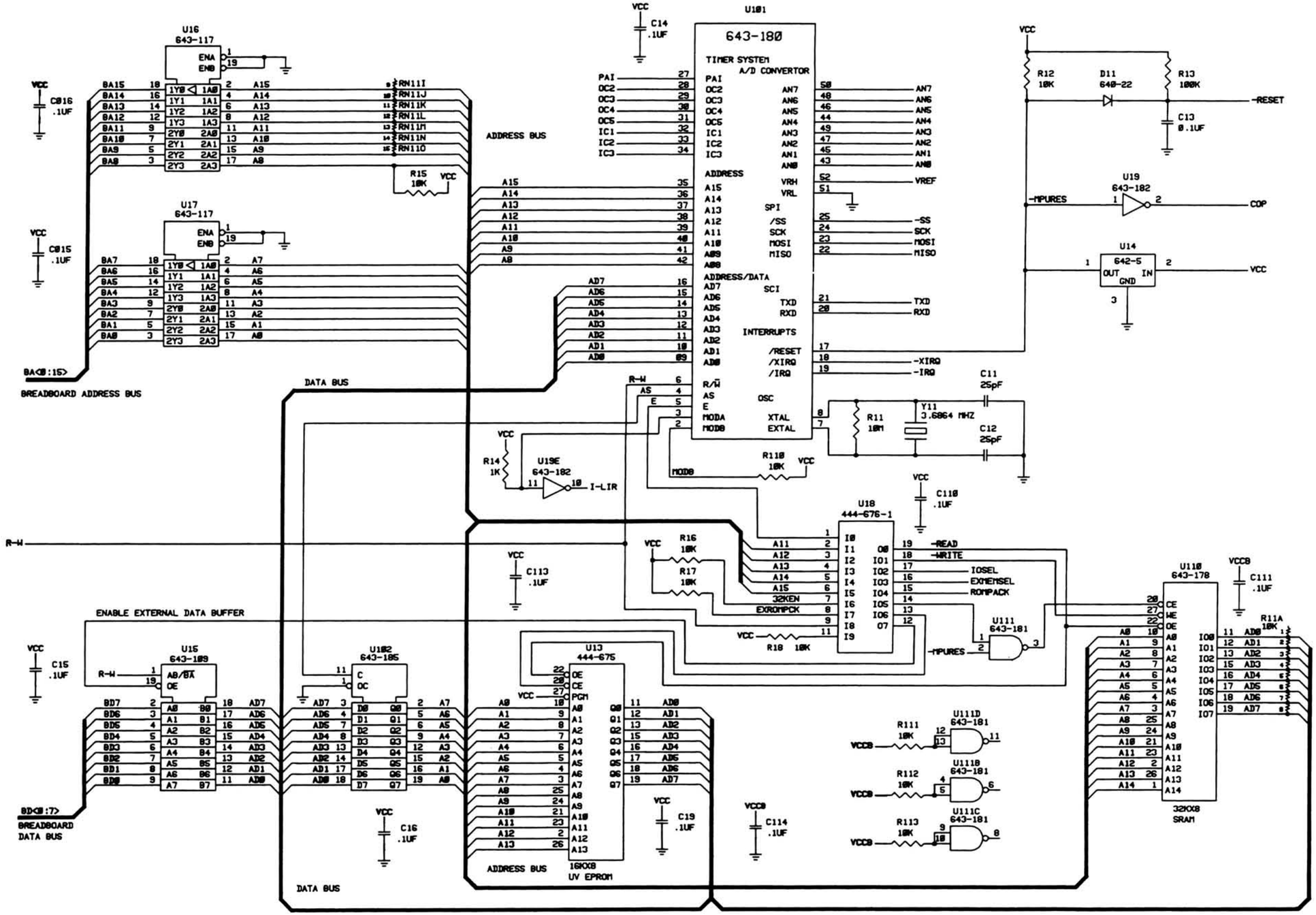
Part of 595-4170-4



SCHEMATIC #7

CPU Module

Part of 595-4170-4

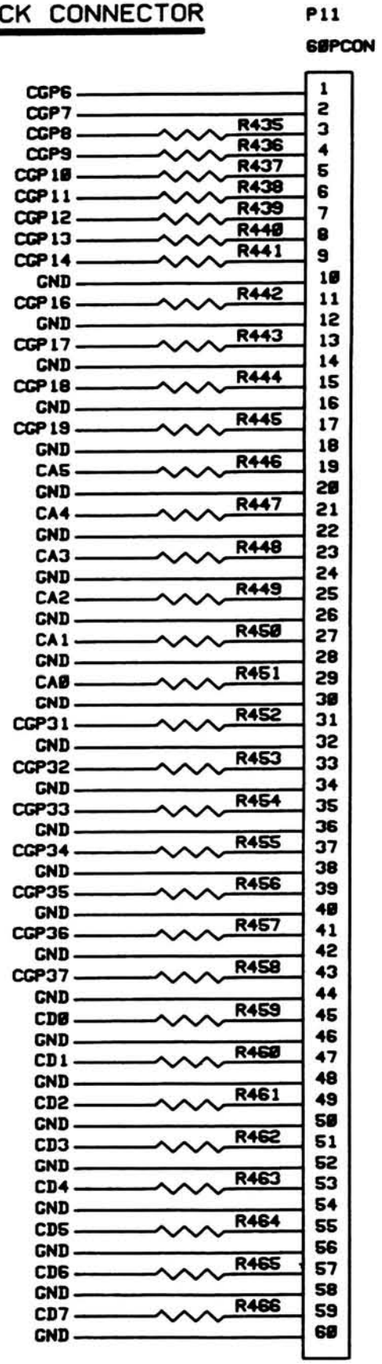


SCHEMATIC #6

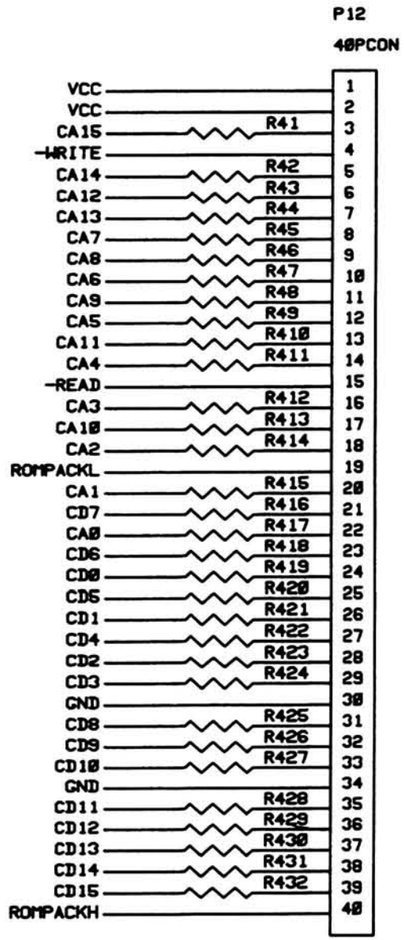
CPU Module

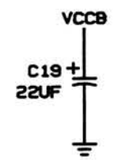
Part of 595-4170-4

BACKPACK CONNECTOR



MEMORY CARTRIDGE SOCKET





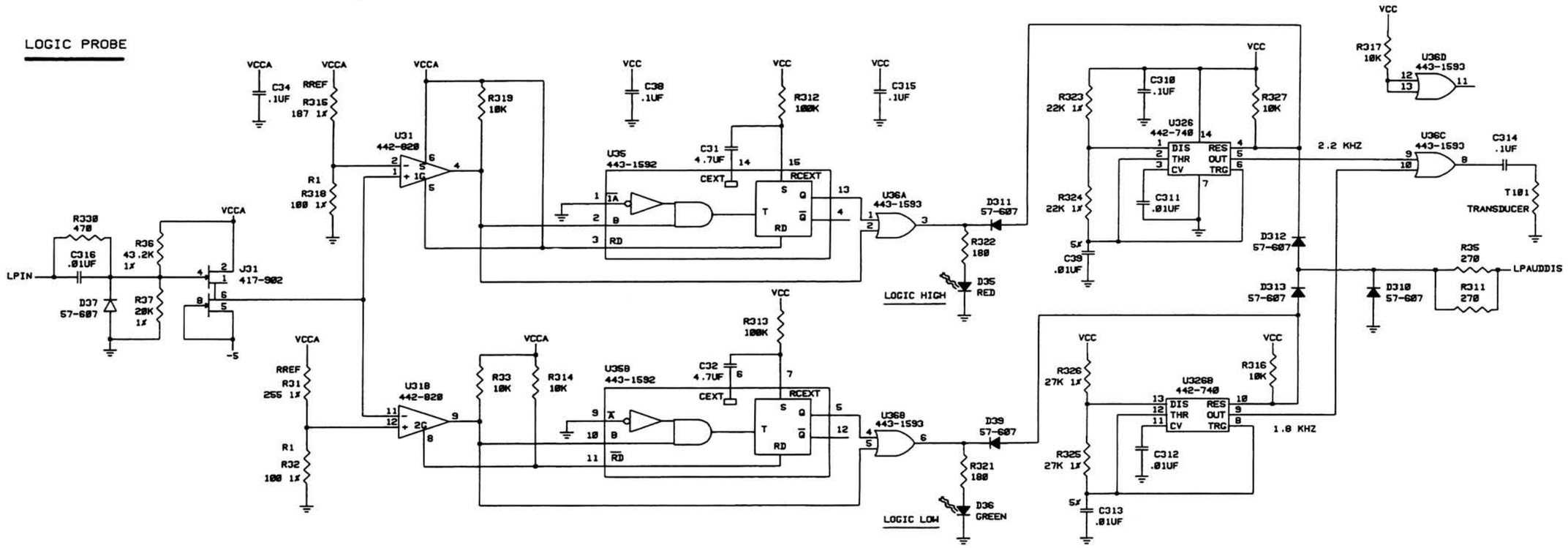
SCHEMATIC #5

Trainer

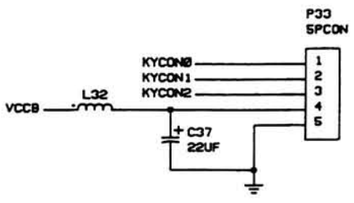
Part of 595-4170-4

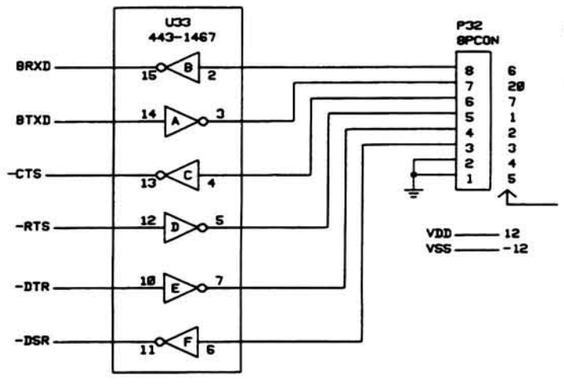
Also on the schematic, the values of R31 is shown as 255 ohms, and R315 is shown at 187 ohms. The correct values are 523 ohms and 825 ohms, respectively. The values shown in the Replacement Parts List are correct.

LOGIC PROBE



KEYBOARD CONNECTOR

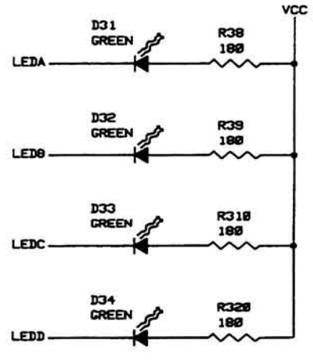


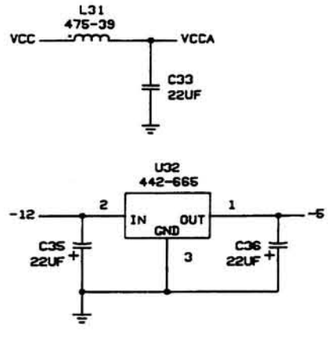


RS-232 INTERFACE

External Connector pinout

CPU INFO LED'S



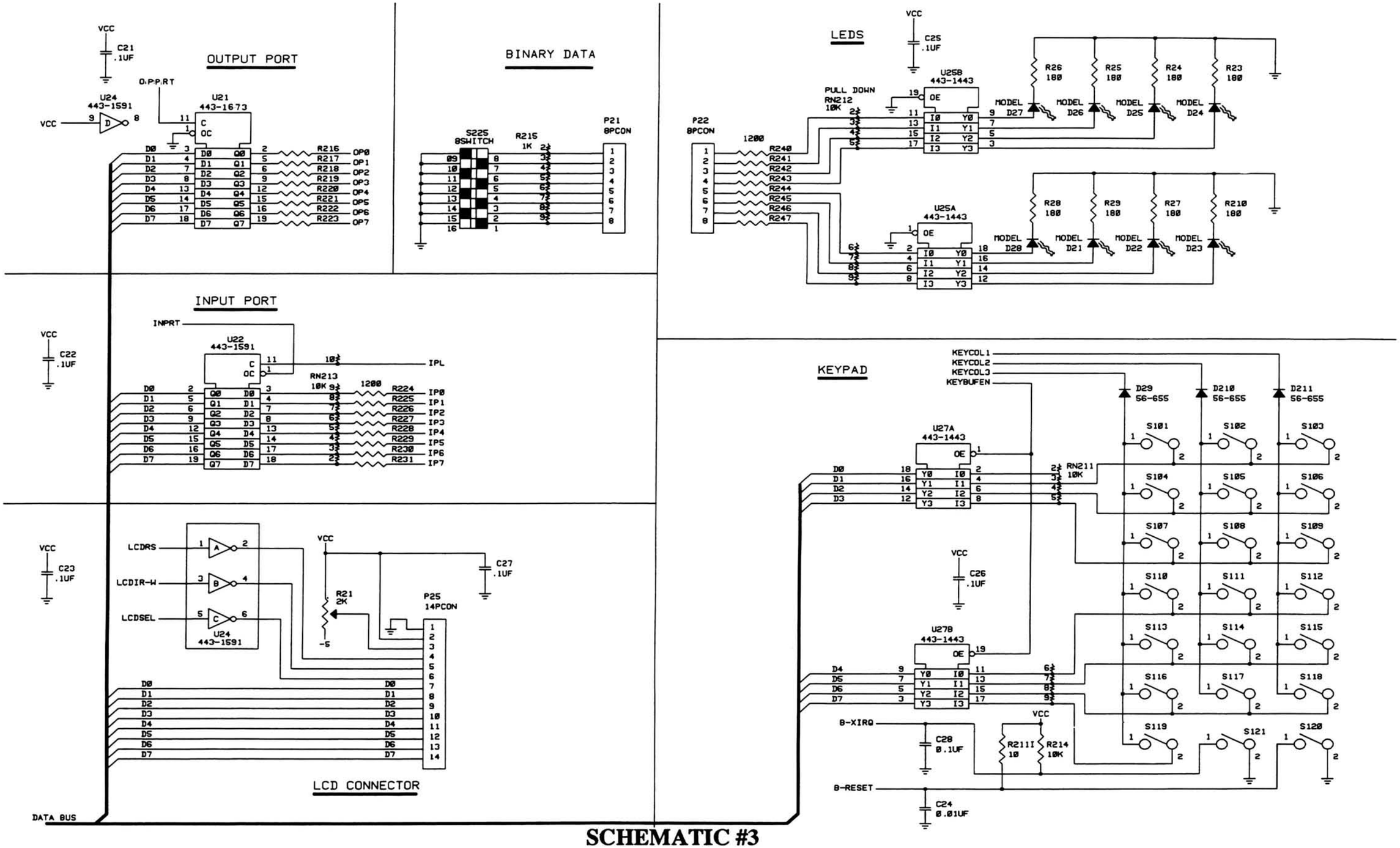


Diode D312 is shown on the schematic, backwards. when you jumper the signal LPAUDDIS to GND, diodes D312 and D313 are suposed to hold both sections of the LM556 chip in reset, effectively disabling the transducer. The way D312 is shown, the lower section of the LM556 will be reset, but not the upper section.

SCHEMATIC #4

Trainer

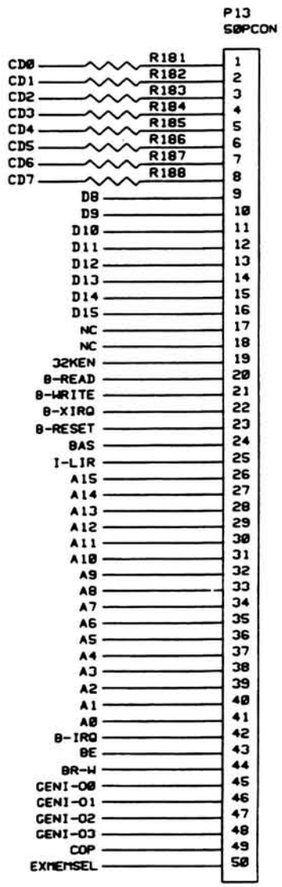
Part of 595-4170-4

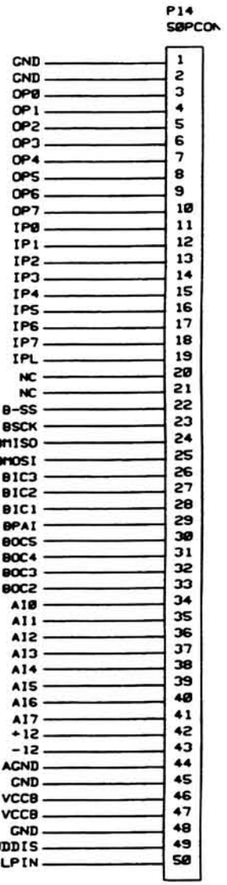


SCHEMATIC #3

Trainer

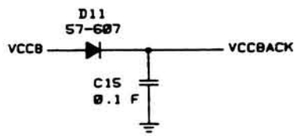
Part of 595-4170-4





SIGNAL CONNECTOR BLOCKS

DC POWER IN

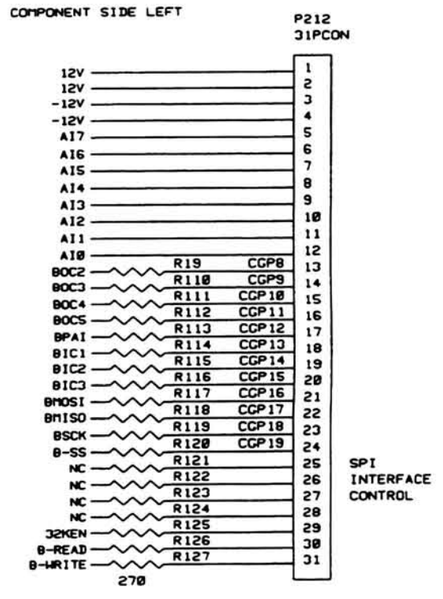


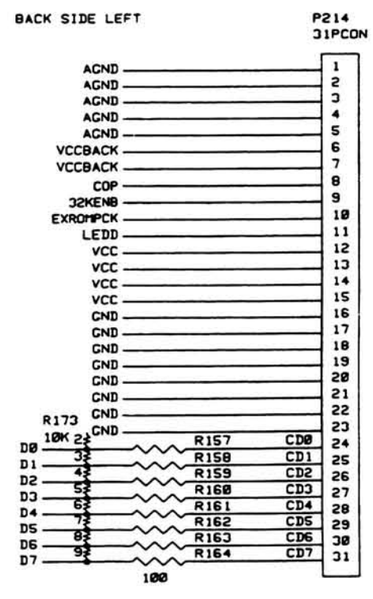
POWER NOTATION DEFINITION

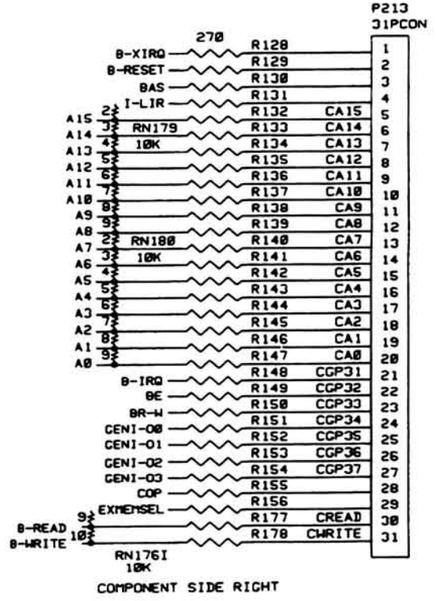
VCC- MAIN +5 VOLT SUPPLY

VCC8- BREADBOARD +5 VOLT SUPPLY

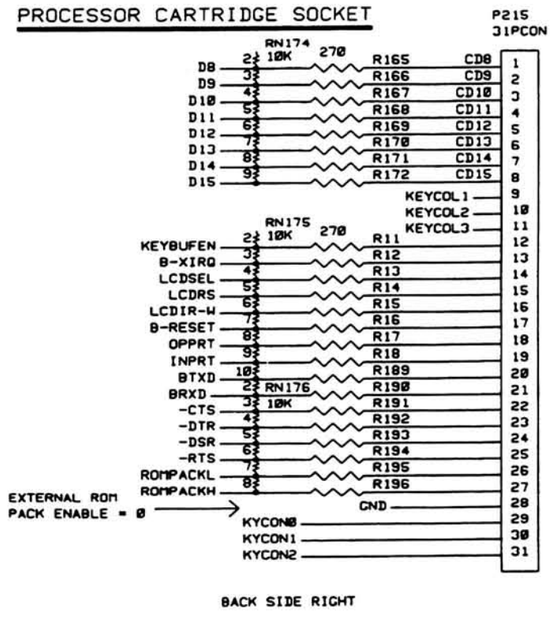
VCCA- ANALOG +5 VOLT SUPPLY







PROCESSOR CARTRIDGE SOCKET



BACK SIDE RIGHT

SCHEMATIC #2

Trainer

Part of 595-4170-4