

## 1701, 1702 ERASING PROCEDURE

The 1701 and 1702 may be erased by exposure to high intensity short-wave ultraviolet light at a wavelength of 2537 Å. The recommended integrated dose (i.e., UV intensity x exposure time) is 6W-sec/cm<sup>2</sup>. Example of ultraviolet sources which can erase the 1701 or 1702 in 10 to 20 minutes is the Model S-52 and Model UVS-11 short-wave ultraviolet lamps manufactured by Ultra-Violet Products, Inc. (San Gabriel, California). **The lamps should be used without short-wave filters, and the 1701 or 1702 to be erased should be placed about one inch away from the lamp tubes.**

### B. MP7-03 Programming System

The MP7-03 is the PROM programming board which easily interfaces with the SIM8-01. All address and data lines are completely TTL compatible. The MP7-03 requires +5VDC @ 0.8 amps, -9 VDC @ 0.1 amps, and 50 Vrms @ 1 amp. Two Stancor P8180 (or equivalent) filament transformers (25.2 Vrms @ 1 amp) with their secondaries connected in series provide the 50 Vrms.

This programmer board is the successor of the MP7-02. The MP7-03 enables programming of Intel's new 1702A, a pin-for-pin replacement for the 1702.

When the MP7-03 is used under SIM8-01 control with control ROM A0862 replaced by A0863, the 1702A may be programmed an order of magnitude faster than the 1702, less than three minutes.

#### **IMPORTANT:**

Only use the A0863 control PROM when programming the new 1702A. Never use it when programming the 1702. The programming duty cycle is too high for the 1702 and it may be permanently damaged.

The MP7-03 features three data control options:

- 1) Data-in switch (Normal-Complement). If this switch is in the complement position, data into the PROM is complemented.
- 2) Data-out switch (Normal-Complement). If this switch is in the complement position, data read from the PROM is complemented.
- 3) Data-out switch (Enable-Disable). If this switch is in the enable position, data may be read from the PROM. In the disable position, the output line may float up to a high level (logic "1"). As a result, the input ports on the prototype system may be used for other functions without removing the MP7-03 card.

### MP7-03 Programmer Board Specifications

#### Features:

- High speed programming of Intel's new 1702A (three minutes)
- Inputs and outputs TTL compatible
- Board sold complete with transformers, capacitor and connector
- Directly interfaces with SIM8-01 Board

#### Connector:

- a. Solder lug type/Amphenol  
72 pin connector  
P/N 225-23621-101
- b. Wire wrap type - Amphenol  
72 pin connector  
P/N 261-15636

#### Dimensions:

- 8.4 inches high
- 9.5 inches deep

#### Power Requirement:

- $V_{CC} = +5 @ 0.8 \text{ amps}$
- TTL GRD = 0V
- \* $V_{DD} = -9V @ 0.1 \text{ amps}$
- $V_P = 50V_{rms} @ 1 \text{ amp}$

\*This board may be used with a -10V supply because a pair of diodes (i.e. 1N914 or equivalent) are located on the board in series with the supply. Select the appropriate pin for either -9V or -10V operation.

A micro computer bulletin which describes the modification of the MP7-02 for programming the 1602A/1702A is available on request. These modifications include complete failsafe circuitry (now on MP7-03) to protect the PROMs and the 50V power supply.

### C. Programming System Interconnection

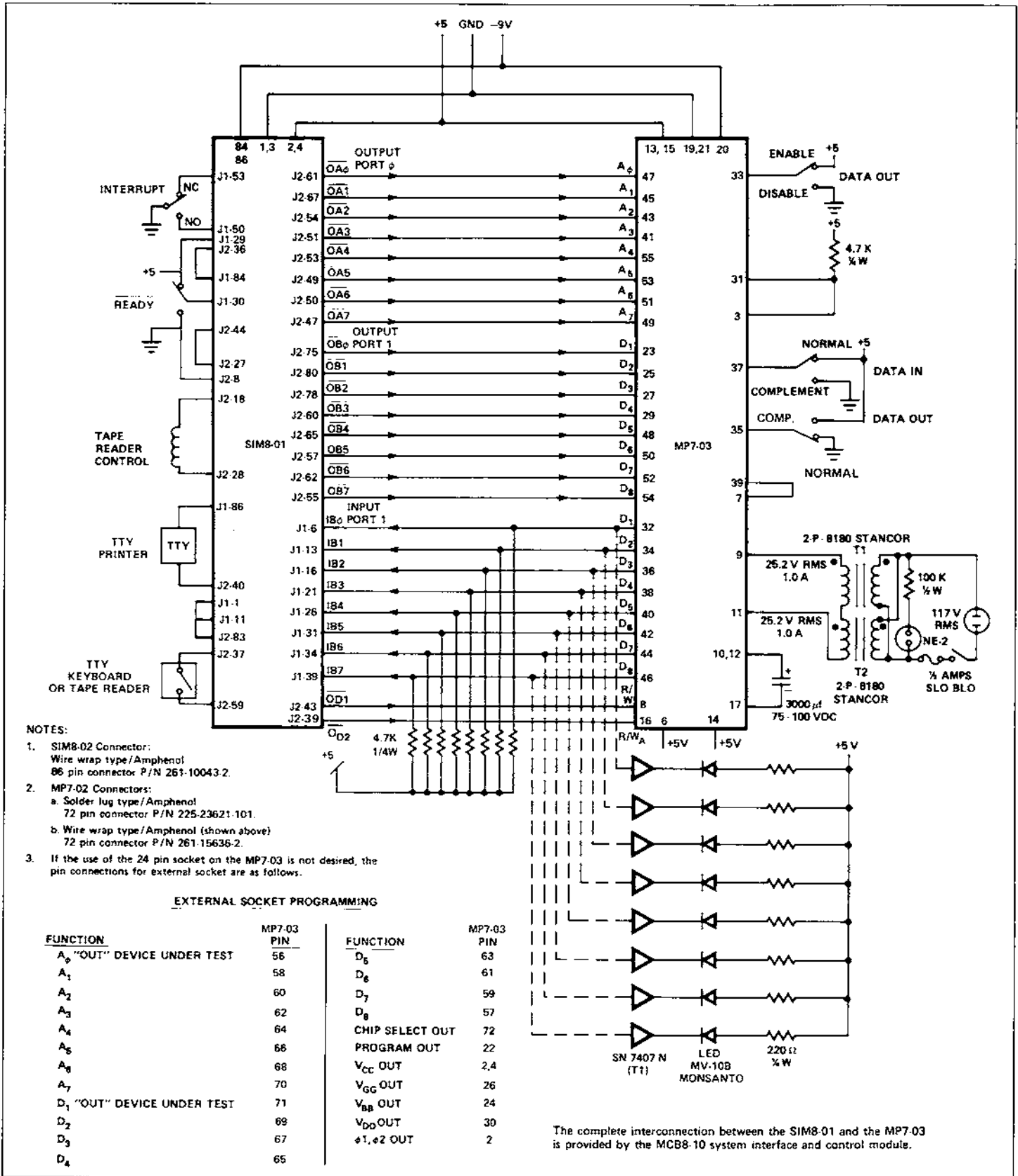
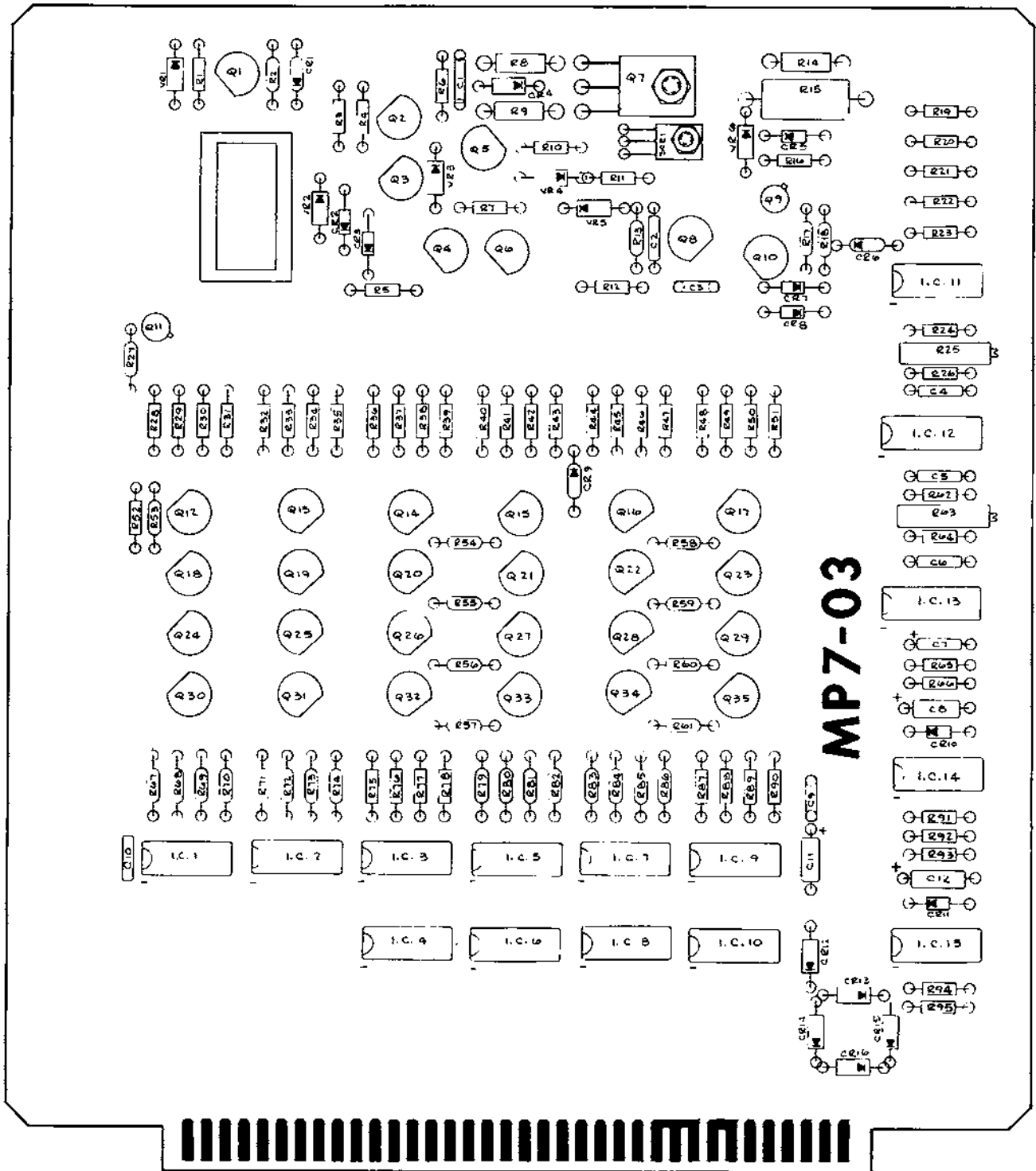


Figure 16. MP7-03/Sim8-01 PROM Programming System



Solder Connector P/N 225-23621-101 R P N M L K J H F E D C B A Z Y X W V U T S R P N M L K J H F E D C B A  
 Wirewrap Connector P/N 261-15636-2 71 69 67 65 63 61 59 57 55 53 51 49 47 45 43 41 39 37 35 33 31 29 27 25 23 21 19 17 15 13 11 9 7 5 3 1

Figure 17a. Component Side of MP7-03 Card

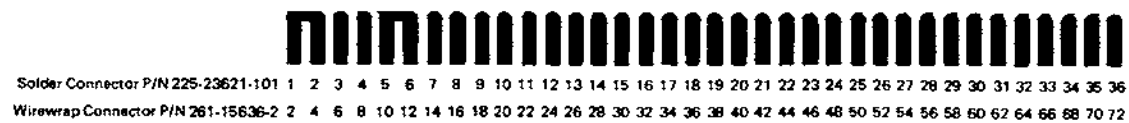
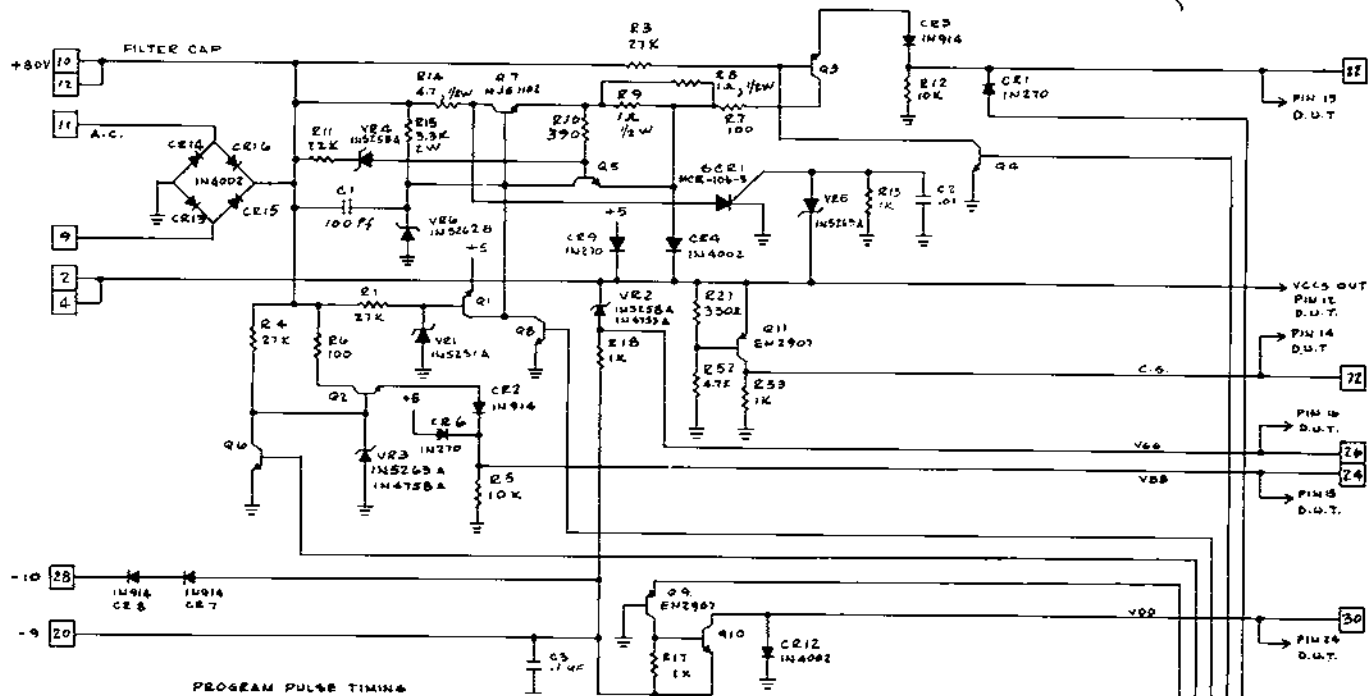
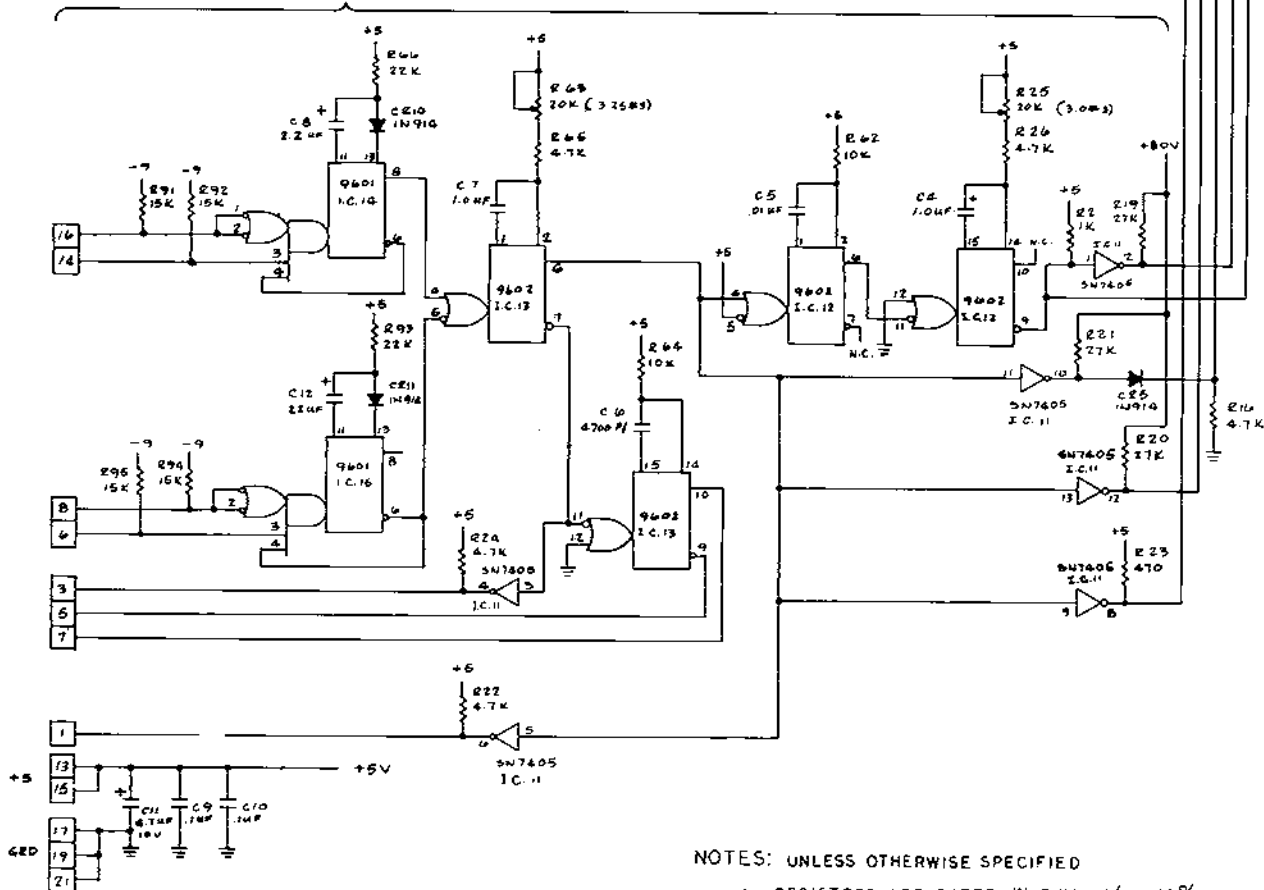


Figure 17b. Pin Definition — Reverse Side of MP7-03 Card

POWER SUPPLY REGULATOR



PROGRAM PULSE TIMING



NOTES: UNLESS OTHERWISE SPECIFIED

1. RESISTORS ARE RATED IN OHMS 1/4W, 10%.
2. TRANSISTORS ARE SE6021, OR 2N3638 OR 2N3722.

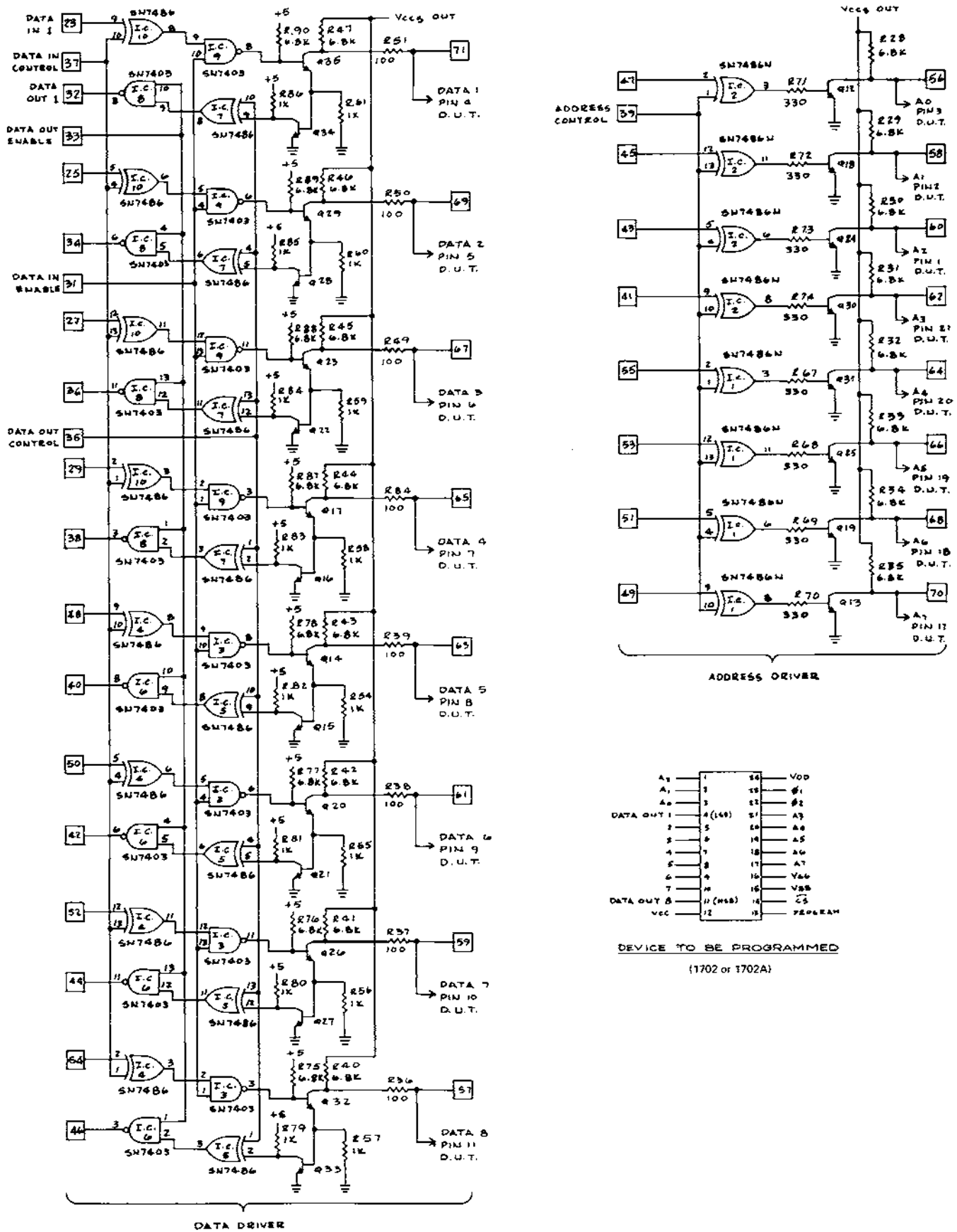


Figure 18. MP7-03 PROM Programmer Board Schematic