

Note: The SIO/M signal is HIGH during CPU I/O access, and is LOW during memory access.

Figure 5-5. Memory Address Decoder Circuit

(2) Optional RAM (installed on OPRM board)

The block diagram for the optional RAM is shown in Figure 5-7. Up to two optional RAM cards can be installed on this device. Each card has a storage capacity of 96KB (HM6264LFP-15 8KB RAM chip \times 12). As Figure 5-7 shows, 96KB of storage are arranged in three blocks of 32KB each stacked vertically. The three blocks are differentiated by the $\overline{32K-1}$, $\overline{32K-2}$, and $\overline{32K-3}$ signals.

Q13, Q16 (TC40H139F) decodes SA14 and SA13 and outputs a chip selection signal for each of the RAM chips. Just as with the standard RAM, the contents of the optional RAM are retained by setting the RAM BACKUP signal to LOW.

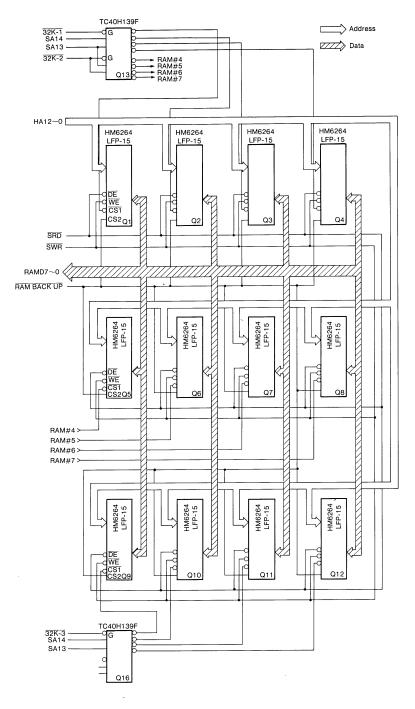
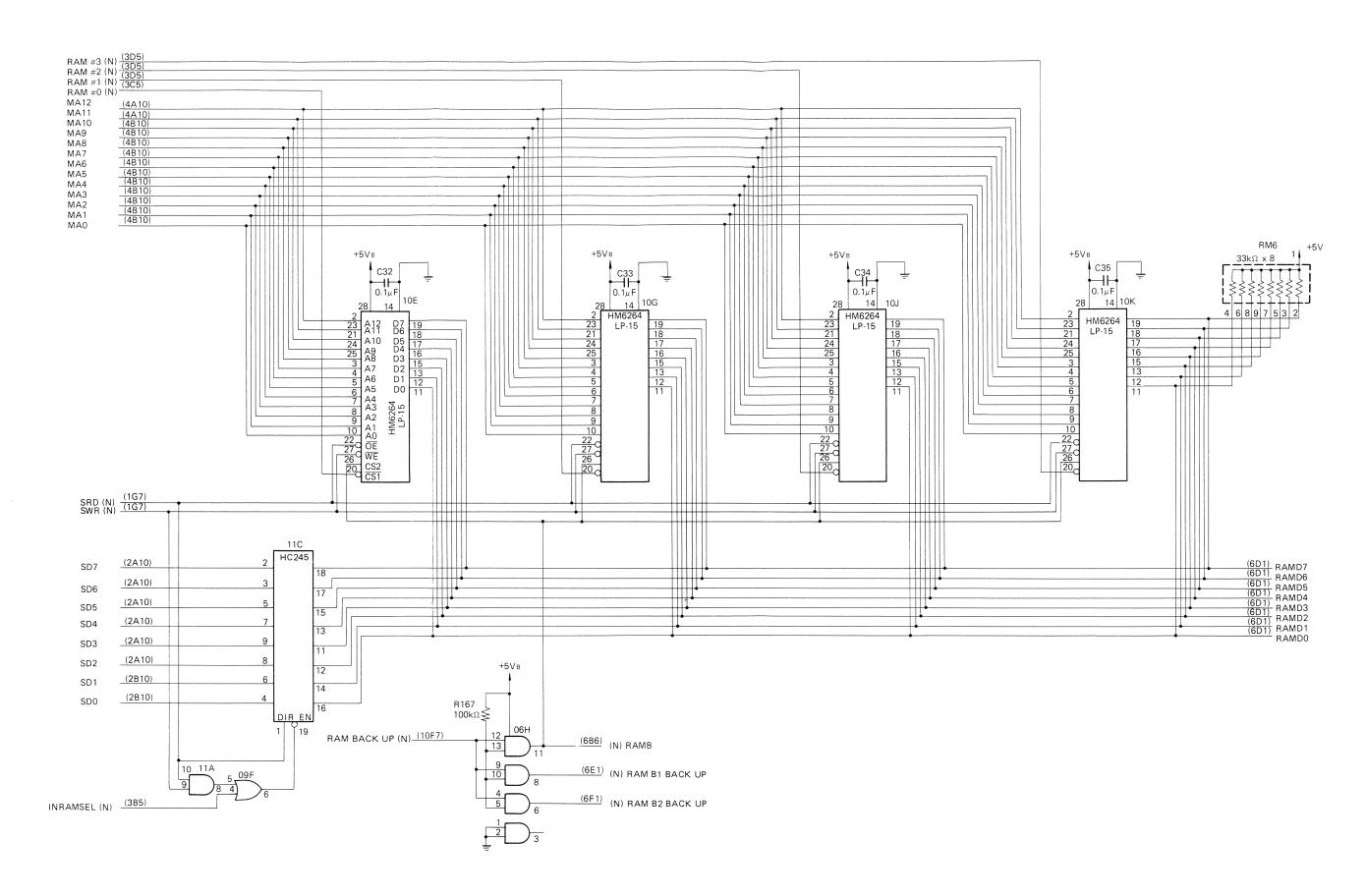
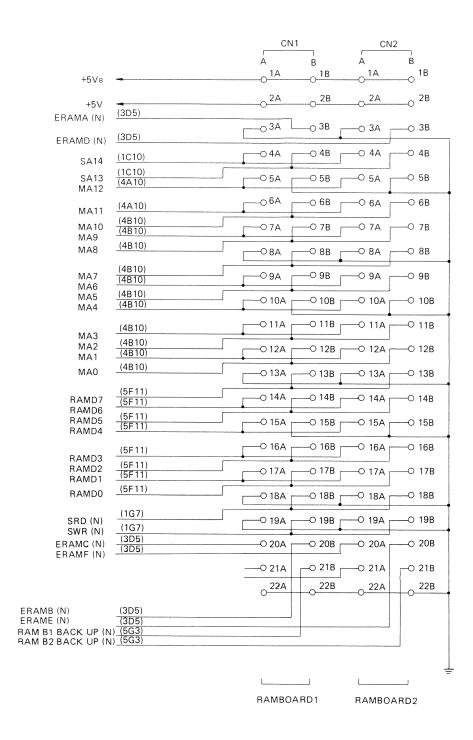


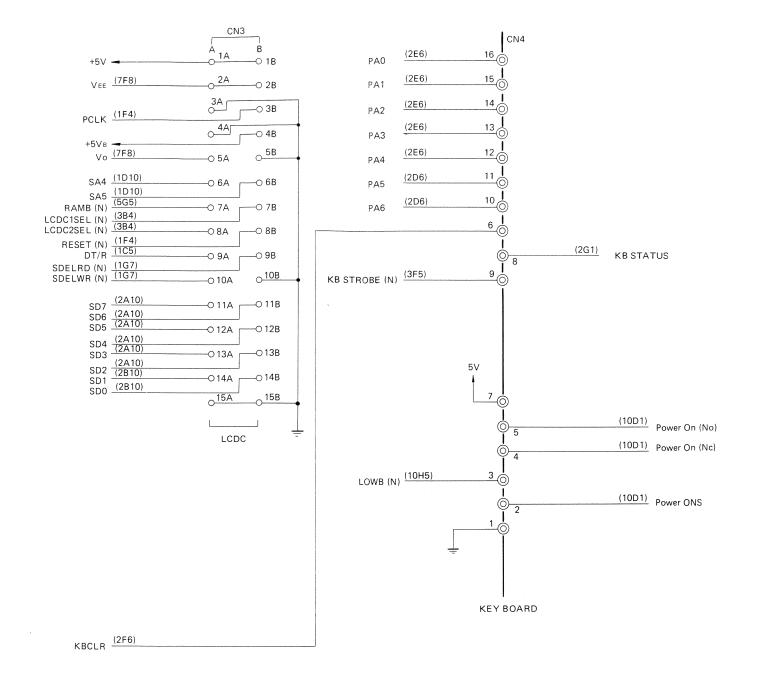
Figure 5-7. Optional RAM Block Diagram





MAIN PCB (OPMP BOARD) CIRCUIT DIAGRAM -- CONNECT

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APPENDIX D — INSTALLATION OF OPTIONAL RAM AND ROM

- **D.1 Installation of Optional RAM Card**
- (1) Remove the top cover assembly (see section 3).
- (2) Connect the optional RAM card to the white CN1 or CN2 connector.

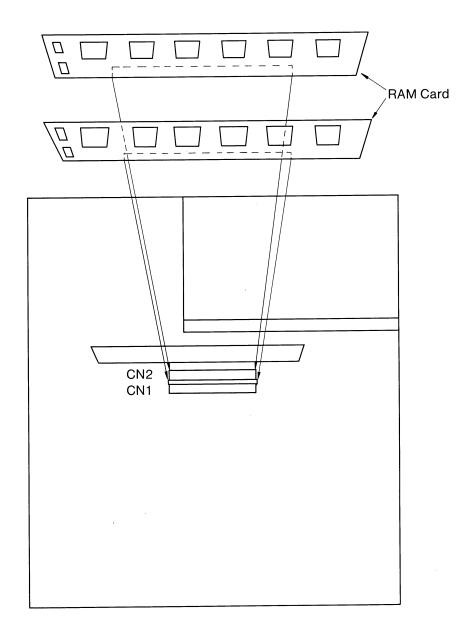


Figure D-1. Optional RAM Installation

Note: Turn off the Memory Power Switch when you install or remove the RAM Card.