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PCC-4 BANK SWITCHING EPROM CARTRIDGE BOARD FOR THE C64 AND C128 IN 64 MODE

DIRECTIONS FOR USE

The PCC-4 is designed for use with 2764's, 27128's 27256's (with minor board mod. as described below) and pin compatible types such as the 5133, 5143, X2864AD, etc. From one to four EPROM's may be used in any combination of types, giving from 8k to 128k of ROM capacity in the cartridge in 8k increments. Any 8k chunk of ROM can be switched into the \$8000-\$9FFF (32768-40959) address space of the computer by storing the appropriate number into the bank select register in the cartridge. In addition, ROM can be switched out completely and 8k of computer RAM is available instead.

Bank Select Register. This register (BSR for short) is a 6 bit write only register located at \$DFFF (57343). The address of the BSR may be changed to \$DEFF (57087) as described below, to avoid conflict with other cartridges, interfaces, etc. which may be plugged into the cartridge port at the same time.

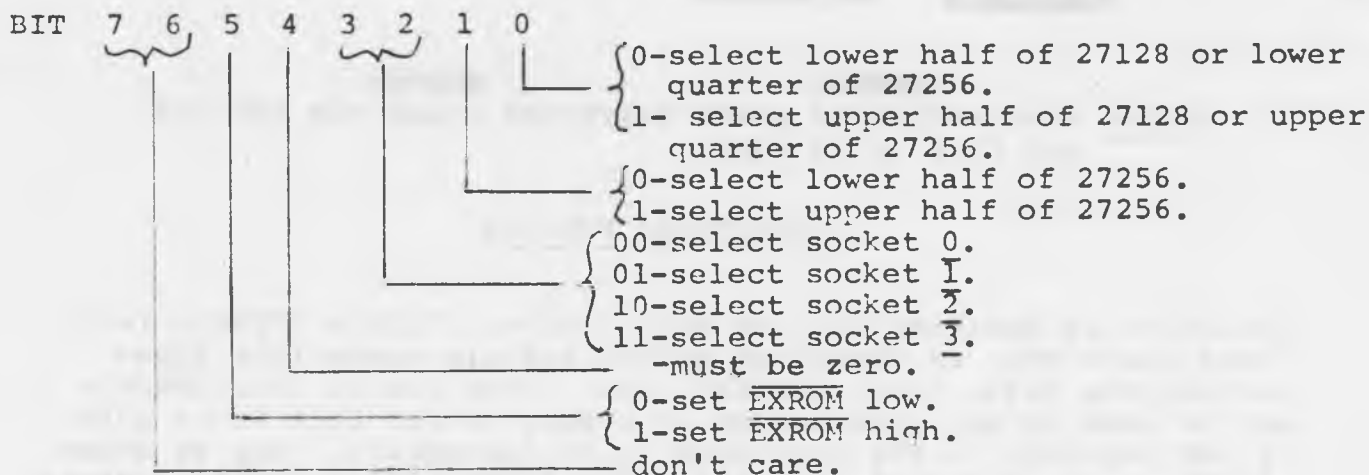
There are four sockets on the board, numbered from 0 to 3 as shown below. The active socket is selected by bits 2 and 3 of the BSR data. If the selected socket contains a 2764, then data bits 0 and 1 of the BSR have no effect. If the selected socket contains a 27128, then bit 0 of the BSR data controls whether the lower or upper half of the 27128 is selected. (Bit zero acts like A₁₃). If the selected socket contains a 27256, then bit 1 of the BSR data selects the lower or upper half of the 27256 (bit one acts like A₁₄), while bit zero selects the lower or upper quarter within the selected half.

Bit five of the BSR data controls the EXROM line. A one here deselects ROM and restores the underlying 8k of RAM.

On power up, the BSR is reset to ZERO. Therefore, if the cartridge is to auto-start, bank zero must contain the initial ROM. "Peeking" the BSR resets it to ZERO.

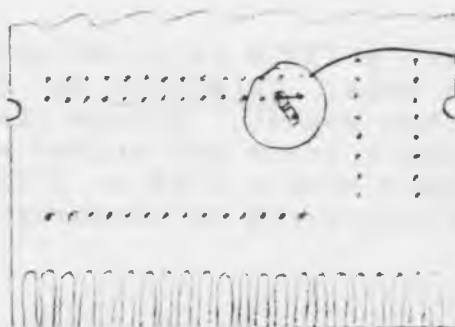
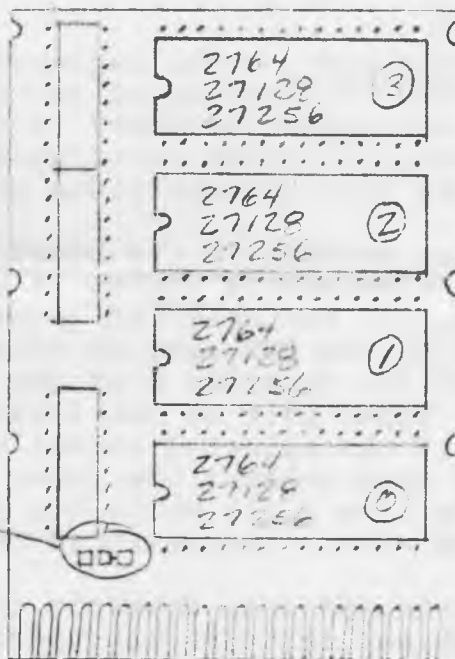
27256 Modification. At each socket where a 27256 is to be used, make the modification shown on the next page. Carefully cut through the trace connecting pins 27 and 28 of the socket. Scrape the solder mask material from the surface of the split trace and bridge with a 'blob' of solder. To use the socket again with a 2764 or 27128, undo the modification desoldering and resoldering as necessary.

BSR CONTENTS



BANK SELECT REG.
ADDRESS CHANGE:
(\$DEFF TO \$DEFF)

CUT HERE



CUT TRACE
HERE.

MODIFICATION
FOR 27256

SCRAPE CLEAN, AND
SOLDER BRIDGE HERE.