



Figure 3-28. Logic diagram for a 4 × 3 memory. Each row is one of the four 3-bit words. A read or write operation always reads or writes a complete word.

enabling one of the four write gates, depending on which word select line is high. The output of the write gate drives all the CK signals for the selected word, loading the input data into the flip-flops for that word. A write is done only if CS is high and RD is low, and even then only the word selected by A_0 and A_1 is written; the other words are not changed at all.