

Chapter 4

The Memory Interface

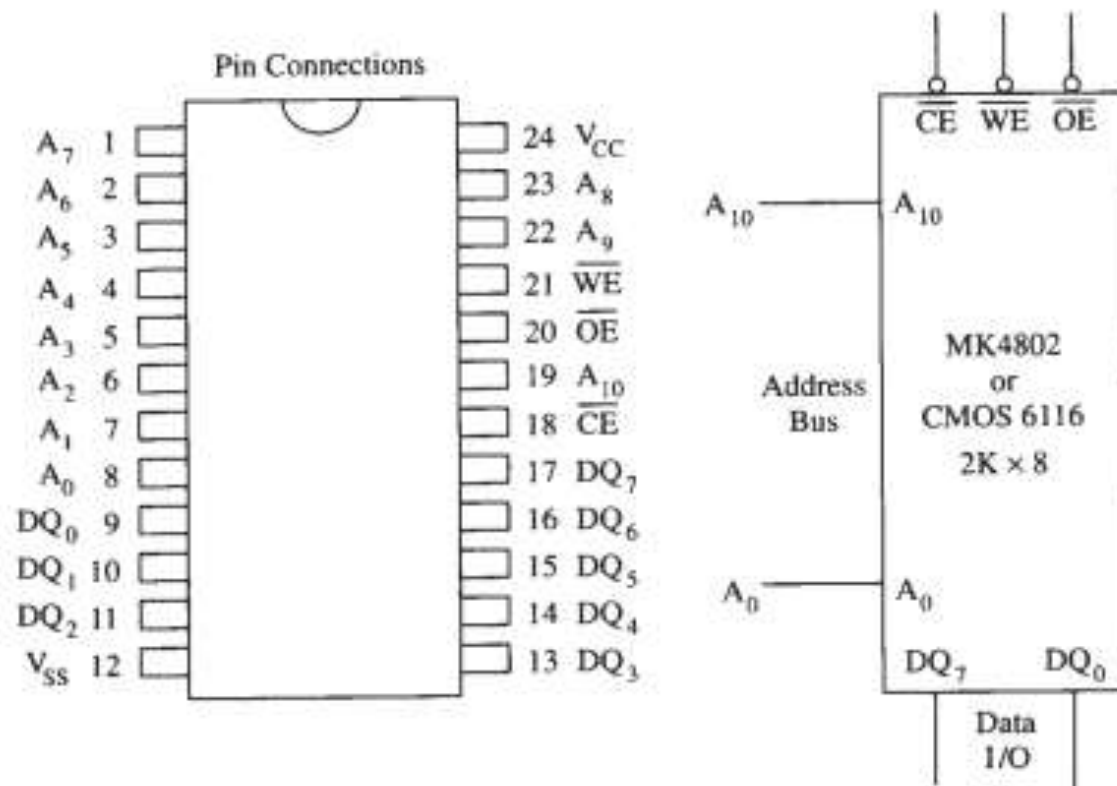
4 – 1 RAMs

RAM means *random access memory* but in general means read/write memory, a memory that can both be read and write into.

Static RAMs

Dynamic RAMs

Figure 4-1 MK 4802 or CMOS 6116 Static R/W Memory Pin Configuration and Logic Symbol



4 – 2 ROMs

The term of ROM means *read only memory*. ROM is read but not written into during the computer operation. Data is permanently written into a ROM by its manufacturer.

Several types of ROM are ;

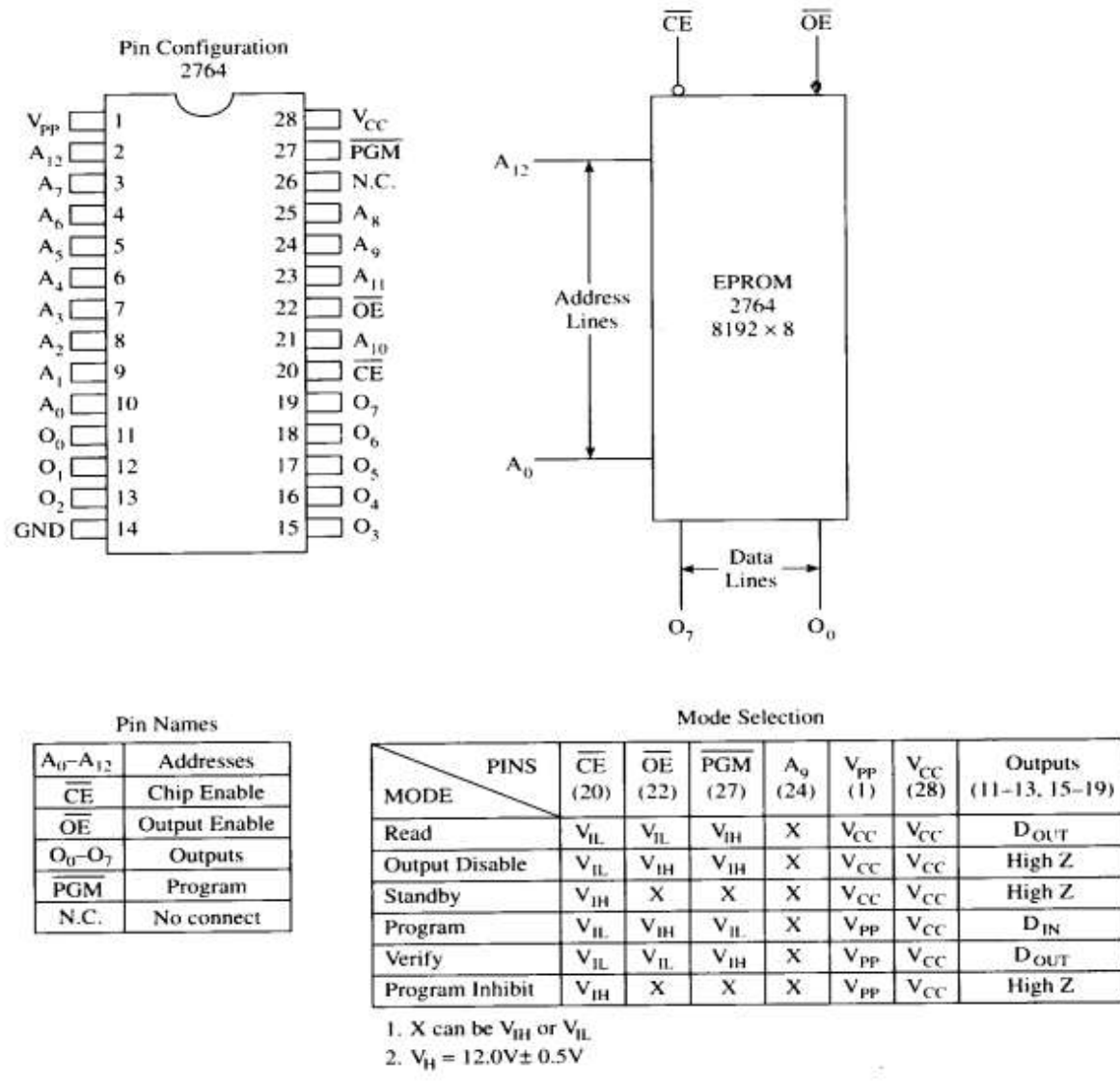
ROM

PROMs (Programmable ROM)

EPROM (Erasable PROM)

EEPROMs (electrically EPROM)

Figure 4-2. 2764 EPROM Pin Configuration and Logic Symbol



4-3 Address Decoding

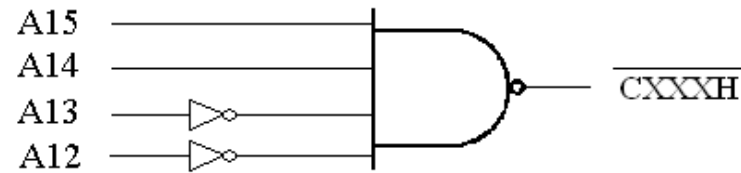


Figure 4-3. 4-input NAND gate as a memory address decoder

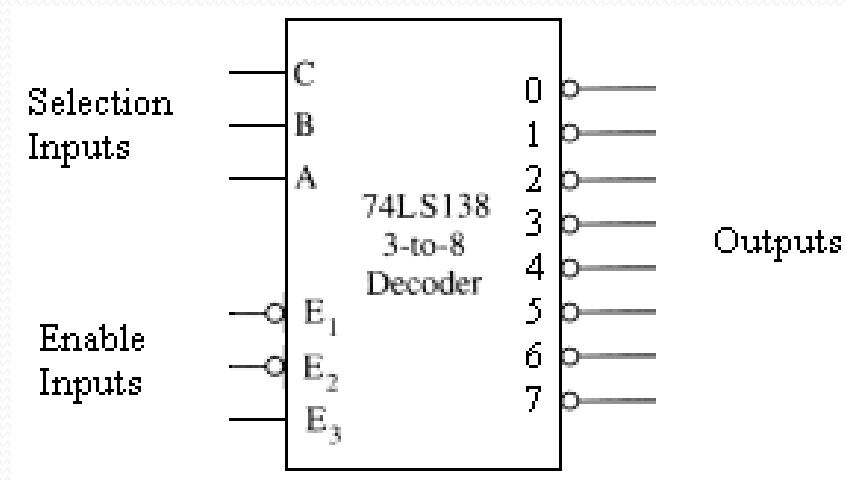


Figure 4-5. The 74LS138 3-to-8 line decoder

Figure 4-7

