

MEMORY EXPANSION WITH THE 6508

How often is it that you have wished for an additional address line or two in your system? The MPS 6508 offers the user the flexibility of accessing up to 16 MBYTES of address space in segments of 64K with almost no overhead.

The 6508 has on board, an eight bit data port. This port is accessible through two registers, a data direction register and a data port register. By setting up a few of the I/O lines as output, and loading the port with the segment value, it will be possible to address a unique 64K of address space. Reloading the data port with a different value now enables the addressing of a different 64K address space.

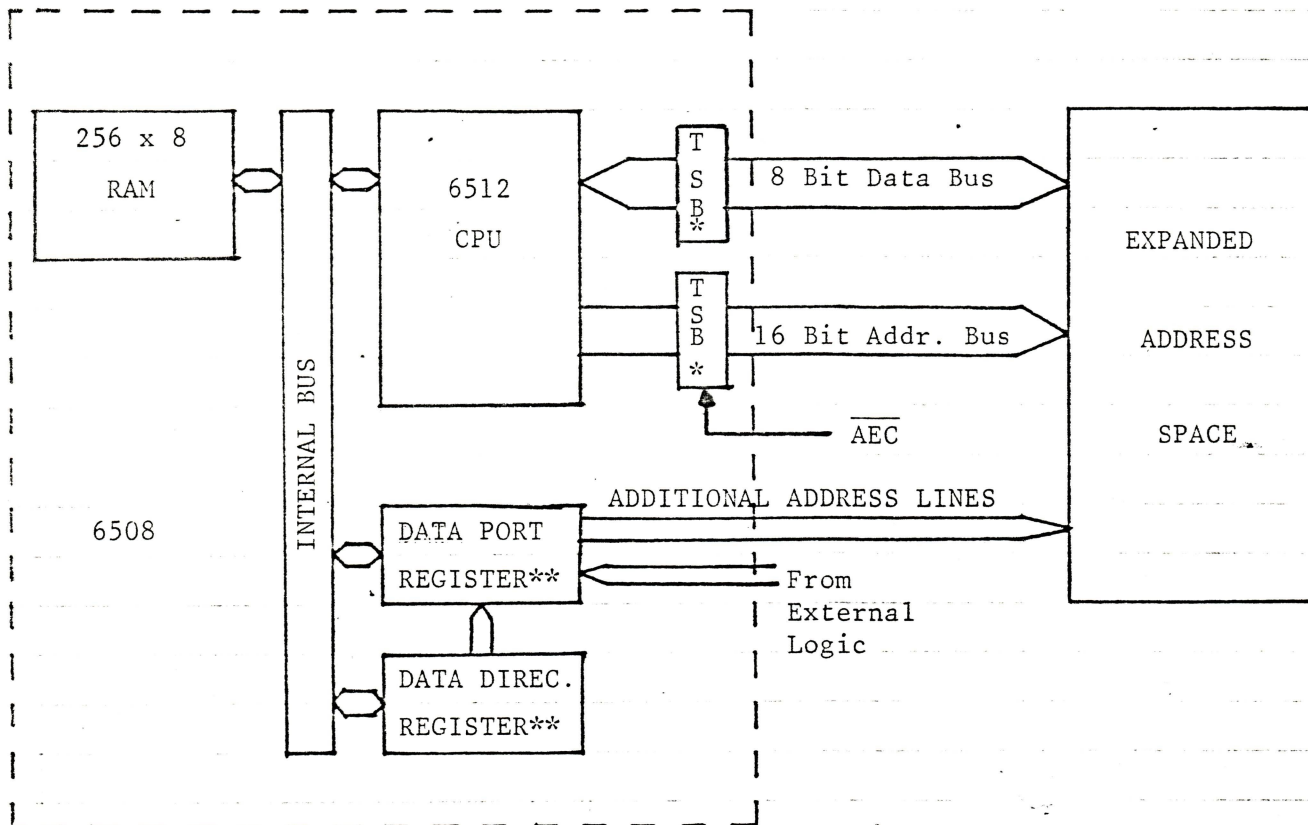
The additional software needed is fairly trivial and is given below:

LDA # Config.	;	Config. is used to set up individual lines as input or output.
STA DDR	;	Store in Data Direction Register.
LDA # SEG	;	SEG is a number from 0 to 255 that decides 64K segment being accessed.
STA DPR	;	Store in Data Port Register.

After this, any time a new 64K segment has to be accessed, only the last 2 lines of code have to be executed.

This expanded addressing capability along with ability for external hardware to decide the address segment to be accessed gives the user a powerful microprocessor.

MPS 6508 - EXPANDED MEMORY CONFIGURATION



* Tri State Buffer

** DPR is at 0000_{16}

DDR is at 0001_{16}