Chip Name: Screen // Memory Map of the physical screen

Inputs: in[16], // what to write
load, // Write-enable bit
address[13] // where to write

Outputs: out[16] // screen value @ the given addr

Function: Functions exactly like a 16-bit 8K RAM:

1. out(t) = Screen[address(t)](t)
2. If load(t-1) then Screen[address(t-1)](t) = in(t-1)
   (t in the current time unit, or cycle)

Comment: Has the side-effect of continuously refreshing a 256 by 512 black-and-white screen (simulators must simulate the device). Each row in the physical screen is represented by 32 consecutive 16-bit words, starting at the top left corner of the screen. Thus the pixel at row r from the top and column c from the left (0<=r<=255, 0<=c<=511) reflects the c%16 bit (counting from LSB to MSB) of the word found at Screen[r*32+c/16].