

FIGURE e5.12.3 Block diagram of the simple cache using the Verilog names. Not shown are the write enables for the cache tag memory and for the cache data memory, or the control signals for multiplexors that supply data for the Data Write variable. Rather than have separate write enables on every word of the cache data block, the Verilog reads the old value of the block into Data Write and then updates the word in that variable on a write. It then writes the whole 128-bit block.