Lab 8 CAM

The objective of this lab is to design and test Content Addressable Memory. The 14-bit memory address design shows 6 bits of tag, 4 bits of group and 4 bits of words, allowing 16 bits of block locations and 16 bits of words. The Harvard uses the same CAM for PM and DM. The first cycle determines if there is a miss. The 16 cycles, afterwards, write the block chosen for replacement into the memory only when the dirty bit is set. The next 16 cycles read the blocks in order. The last cycle checks the hit, accesses to the cache and completes it.