

Quiz 2

13 December 2011

1. Suppose you work for a CPU manufacturer that has exhausted its supply of XOR gates. Show whether or not the following expression is equivalent to $A \oplus B$ by completing a truth table of all possible values of inputs A and B.

$$A \cdot B' + A' \cdot B$$

2. In the memory hierarchy, what is the main difference between *volatile* and *persistent* memory?
3. Why do we say that a *stored-program computer* (von Neumann architecture) is a *general-purpose* device?