

```
int atomicAnd(int* address, int val);  
unsigned int atomicAnd(unsigned int* address,  
                        unsigned int val);
```

reads the 32-bit word **old** located at the address **address** in global or shared memory, computes **(old & val)**, and stores the result back to memory at the same address. These three operations are performed in one atomic transaction. The function returns **old**.