
Subject: Re: [PATCH] mark read_crX() asm code as volatile

Posted by [hpa](#) on Wed, 03 Oct 2007 06:18:22 GMT

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Nick Piggin wrote:

```
>>
>> This should work because the result gets used before reading again:
>>
>> read_cr3(a);
>> write_cr3(a | 1);
>> read_cr3(a);
>>
>> But this might be reordered so that b gets read before the write:
>>
>> read_cr3(a);
>> write_cr3(a | 1);
>> read_cr3(b);
>>
>> ?
>
> I don't see how, as write_cr3 clobbers memory.
```

Because read_cr3() doesn't depend on memory, and b could be stored in a register.

-hpa
