

## Re: working with addresses

**Source:** <http://coding.derkeiler.com/Archive/C/ CPP/alt.comp.lang.learn.c-cpp/2004-01/0553.html>

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**From:** pcrAKAJumbo (nospam)

**Date:** 01/12/04

Date: Mon, 12 Jan 2004 01:49:08 -0000

"Josh Sebastian" <curien@cox.net> wrote in message  
news:pan.2004.01.12.00.39.00.359025@cox.net...

> On Mon, 12 Jan 2004 00:18:20 +0000, pcrAKAJumbo wrote:

>

>> "Richard Heathfield" <dontmail@address.co.uk.invalid> wrote in message

>> news:btsfup\$ieq\$I@hercules.btinternet.com...

>>> pcrAKAJumbo wrote:

>>

>>> But if you CPU is addressing in 32 bit mode you cannot simply start

>>> addressing with 10 bit addresses.

>>> That's nonsense.

>

> Pentium4 CPUs have two addressing modes: 32-bit and 36-bit.

> In the early x86 days, there were 16- and 32-bit addressing modes.

>

> And that's just a couple of examples for PCs. If you leave the x86 world,

> it can get even more convoluted.

Yes but it is not a trivial operation to switch addressing modes.

If a program is designed to work in 32 bit mode it won't work in 16 bit mode.

>

>>> in a 32-bit array, he would prefer to see:

>>>

>>> 00000000110011101011001010111110

>>>

>>> rather than

>>>

>>> 11001110101100101011111000000000

>>>

>>> Too right I don't understand it.

>> What the heck are you talking about now? These are two completely

>> different numbers.

>

> They both have the same bit-sequence, just aligned differently.

They are two completely different numbers.

alt.comp.lang.learn.c-c++: Re: working with addresses

At a quick glance it looks like the lower one is the upper multiplied by  $2^8$  or something.

>

> > *Yes but in this example I am \*obviously\* talking about a PC with a 32*

> > *bit address bus.*

>

> *Is an "address bus" what addresses use to get to work in the morni*