

Re: Cost of calling a standard library function

Source: <http://coding.derkeiler.com/Archive/Assembler/alt.lang.asm/2004-03/0081.html>

From: Beth (*BethStone21_at_hotmail.NOSPICEDHAM.com*)

Date: 03/03/04

Date: Wed, 3 Mar 2004 14:57:30 -0000

The Half A Wannabee wrote:

> *Beth wrote:*

> > *Are these results directly comparable to the previous results you had?*

>

> *Very good question. The truth is, I didnt notice :-)* Because when I studied

> *the function you worte, where you had rearranged the float and usage of the*

> *registers, I found it so beautifully written, that I automatically*

> *considered it to perform faster then my own code. Here are the two again, to*

> *avoid the confusion of having to look past to the other posts: And now I see*

> *the reason (I think) , and what you forgot (maybe) when you made that*

> *streamlined procedure. It accesses/reads memory using esi 4 instructions in*

> *a row, and then edi four instructions in a row. If you look at my proc,*

> *you'll see (as I do now (= I did _not_ do it intentionally, it was just pure*

> *luck))- you will see that it writes to ebx, the reads from it, etc, while*

> *your code keeps reading the memory through esi register 4 times in a row.*

> *But (and now I am just speculating widely) while the memory for both the*

> *rectangles are in the cache by now, the processor is probably*

> *"understanding" that it doesnt need ebx to carry the value, while it can*

> *saflly move it within the cache, without having to go via ebx. Maybe this is*

> *a totally wrong assumption, but if it is, this should maybe be implemented?*

> *So why cant it do it with the way you wrote your instructions ?*

Because you

> *use the same register to adress another _memory_ location in the*

alt.lang.asm: Re: Cost of calling a standard library function

instuction

> *imidiatly following, using the same register to spesify diffrent memory. But*

> *this is just speculation on my part. It may be dead wrong.*

>

> *(Later :) Okey speculation will not help !!! I have now tested my register*

> *arrangements, i*