Subject: Has anyone used CUDA with UPP?
Posted by nixnixnix on Sun, 29 Jul 2007 20:49:02 GMT

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CUDA is NVidia's API for writing programmes which use the GPU for calculations. Anyone with a GeForce 8800 or better should be able to use this API.

Unfortunately though all the examples are written for VC++ and they also need to be compiled with a special compiler (nvcc.exe) and tinkering with this sort of stuff is not in my comfort zone so am wondering if anyone else on here has had a play and got it working?

If you want to find out more about CUDA you can go here

where there are lots of cool free toys to download and play with as well as guides to what the hell they are. Ok, back to being befuddled for me....

Nick

Subject: Re: Has anyone used CUDA with UPP?
Posted by mr_ped on Sun, 29 Jul 2007 21:55:31 GMT

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systems."

Looks like there is maybe some way to get it run on Linux... that means it should be not strictly MS VC only thing.

I will read a bit further and see if there's more promising information.
In case this can be easily incorporated into U++ for both Windows and Linux it may bring new (power) users to U++.
OTOH the Mac is not supported, so this can't be really cross platform.

And firstly somebody must add it to U++ .

Uh.. now it occurred to me...
There will be very likely problems with license. I can't see straight away on NVIDIA page under what license they give away the CUDA tools, but I don't think it will be BSD compatible one.

So to make CUDA as a supported default package into U++ will be probably impossible. (still if you manage to find out the license, feel free to post here what is it about)

It can be still some optional package for external download if somebody does manage to provide package of it, and if the NVIDIA CUDA license allows such packaging (I'm in doubt of this).

(sorry, I don't have more time or interest to get deeper into this stuff right now)

Subject: Re: Has anyone used CUDA with UPP?
Posted by mr_ped on Sun, 29 Jul 2007 22:03:30 GMT
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"CUDA and its libraries are compiled with gcc 3.4.5 and the same tools should be used on other distributions. Alternatively, compatibility packages containing libstdc++.so.6 may be used. These are available for many Linux distributions. For example, on recent Fedora Core releases, the compat-libstdc++-34 is needed."

btw, the libraries itself will be very likely just binary, so it is not worth of adding to U++ default packages.

Still if somebody manages to make a package for easy usage in U++, it will help you... You need to hope there's somebody experienced enough who can do that.

Anyway, the supported linux flavors so far are only Red Hat and OpenSUSE, no Debian/Ubuntu, so I can't help with this.
I'm not experienced enough to hack Red Hat package to work on Debian...

Subject: Re: Has anyone used CUDA with UPP?
Posted by nixnixnix on Mon, 30 Jul 2007 13:43:32 GMT
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Thanks for taking the time to look at this. Yeah I wasn't so much looking for it to be incorporated into U++ as to be able to configure theIDE to be able to make use of CUDA with a UPP interface. It seems that this must be possible but that I need to learn more about how to do a "custom build"? or some such. Its kind of a side project for me just now but yes, I'm sure that if there was a configuration (or howto) for using CUDA it could well attract new users.

Thanks again,

Nick

p.s. the whole CUDA thing is pretty new so I suspect they will support more platforms as things progress.